

TALK WITH ivy

The world's first AI-based
Intercom Voice Assistant

COMMEND

PRODUCT CATALOGUE

A Symphony of Communication Solutions

TRUSTED. COMMUNICATION. ALWAYS.



WHY WE DO WHAT WE DO

Helping to make business processes more efficient, assisting and protecting people at work and in their everyday lives, enabling instant targeted response to challenging situations... These are our driving ambitions. From initial contact to long-standing service we stand by our customers as their **TRUSTED** and competent partner, advisor and solution provider.

Our efforts and achievements are based on decades of experience, enthusiasm and passion for **COMMUNICATION**. We develop and manufacture our products to the highest standards, and we ensure sustainability with the industry's longest product lifecycles and most efficient total cost of ownership.

From our technical solutions to our business relationships - whatever we envision, plan or implement **ALWAYS** reflects our dedication to helping people. For decades, our customers' voice has been our most important source of inspiration and creativity, driving us forward for over 50 years and many more to come. Let's be creative together! We are looking forward to being in touch.

TRUSTED. COMMUNICATION. ALWAYS.

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ABOUT COMMEND

PASSION FOR TRUSTED. COMMUNICATION. ALWAYS.



1971

Founded in Austria



23

Sales organisations worldwide



60+

Operating in more than 60 countries



250+

Employees at Commend International in Salzburg



550+

Employees worldwide



Certified

ISO 9001:2015
ISO 14001:2015
EN ISO 27001:2013
IEC 62443-4-1



100% QUALITY DESIGNED AND BUILT IN AUSTRIA

From the development and design of our products to the selection of individual components and our quality assurance processes – everything is dedicated to ensuring a long product life for the end user. The result are long-lasting products that provide excellent value for money.

To demonstrate our commitment to quality and durability, all our hardware devices now come with a 5-year warranty. This extended warranty period reflects our trust in the longevity and sustained performance of our products.

Our production facilities in Salzburg, Austria, are the birthplace of the stuff that Intercom dreams are made of. Millions of electronic components are brought together to create products that satisfy our clients' demands and deliver excellent audio quality that is second to none.



EFFICIENT COMMUNICATION, DESIGNED FOR IDEAL VALUE CREATION AND PROVIDING DAY-TO-DAY HELP AND PROTECTION TO PEOPLE.

When every second counts, people need technology that will not just work, but work with one hundred per cent reliability - anywhere, around the clock.

At Commend, we are aware of our responsibility. That's because millions of people trust the Commend brand and our products every day, whether at a London tube station, a car park in France, steel works in China or a hospital in the United States. Where every word counts, it speaks in favour of solutions by Commend.



MORE THAN 50 YEARS OF EXPERIENCE

Since its founding in 1971, Commend has grown from a small family-owned business into a global leader in Integrated Intercom Systems. Today, our unique solutions help to ensure the protection of people, property and valuables throughout the world. Commend Intercom Solutions have proven highly successful in many industry sectors.



TRUSTED VOICE TECHNOLOGY BY COMMEND

ULTIMATE SPEECH QUALITY IN EVERY SITUATION

Since its foundation over 50 years ago, Commend has been researching and perfecting the speech quality of its systems to support customers and users with ultimate speech intelligibility even under the harshest conditions.

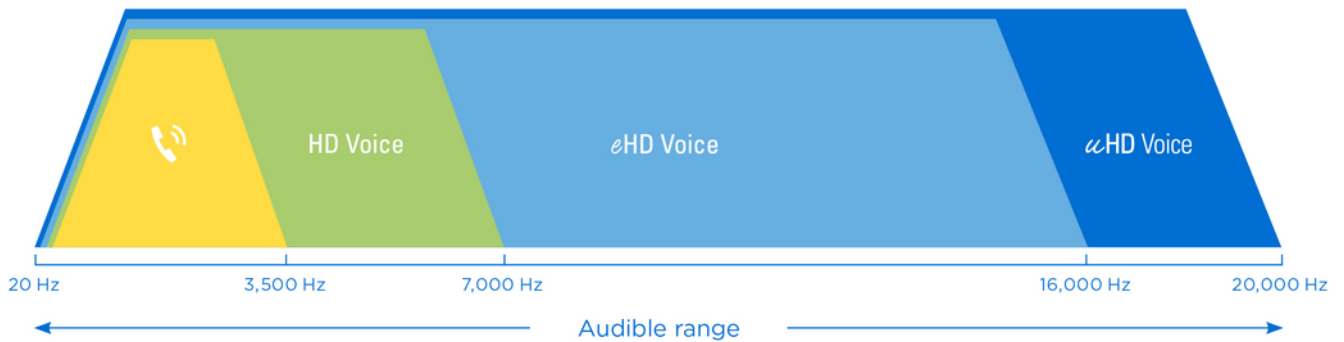
In the multi-faceted world of Intercom acoustics, everything down to the smallest influencing factor is taken into consideration when it comes to perfecting acoustic qualities. This includes everything from basic physical sound properties to signal processing and the selection of individual electronic components. In doing so, Commend keeps pushing the frontiers of Intercom technology.

Our passion for audio has driven us to revolutionize our speech quality even further with the power of Artificial Intelligence. Introducing "AI Cleans Voice from Noise," our latest innovation that leverages AI to recognize and suppress background noise. This groundbreaking development has even won us an award at the ISC West trade show in Las Vegas.

Passion for Audio by Commend.

audio.commend.com

THE AUDIBLE DIFFERENCE



3.5 kHz

Public telephone network

7 kHz – HD Voice

Standard Intercom and mobile phones

16 kHz – Enhanced HD Voice

Long-standing standard for Commend Intercom

up to 20 kHz – Ultra-HD Voice

The Commend Intercom standard for transmitting audio with a bandwidth of up to 20,000 Hz, i.e., the entire human audible frequency range.



NATURAL COMMUNICATION



INTELLIGENT VOLUME CONTROL



NOISE CANCELLATION ECHO SUPPRESSION



LOUDSPEAKER-MICROPHONE MONITORING

- **OpenDuplex®** – Commend Standard for a natural conversation experience – volume-enhanced speaking and simultaneous listening
- **Speech Transmission Index (STI) = 0.96**
STI is a standard measure for speech intelligibility, ranging over values up to 1.00 = perfect intelligibility.
- Clear voice transmission at high volumes **based on Intelligent Volume Control (IVC)** for automatic adjustment to ambient acoustic conditions.
- **AI-Powered Noise Cancellation** uses deep neural networks and device-specific audio training data to effectively eliminate unwanted sounds (wind, traffic, background talk), providing pristine, uninterrupted communication.
- **AI-Based Echo Cancellation** leverages Commend's proprietary deep neural networks to ensure smooth and natural conversations without noticeable echoes or delays.
- **Audio Monitoring** – User security thanks to fully automated, noise controlled system response (e.g., automatic emergency call triggered by loud distress noise)
- **Loudspeaker-to-Microphone Self-monitoring** – constant verification of Intercom stations' proper functionality reduces the need for manual inspections
- **Audio recording** and **lip-synchronous audio/video recording** of Intercom conversations for documentation, evidence keeping and quality purposes.
- **Peer2Peer Audio** reduces network and server load to ensure efficient use of resources
- **Simplex mode** for applications requiring controlled communication – e.g., security solutions based on the classic 'push-to-talk / release-to-listen' method
- **Speech Activity Detection** senses when calls are finished and terminates the call connection automatically
- **Conference Call function** enables simultaneous call connections with multiple subscriber units
- **ELA and Public Address functions** Equalizer for fine-tuning to ambient acoustic conditions.



A question
of trust

PROTECTING WHAT MATTERS

LEADING THE WAY IN CYBER SECURITY

In an era where digital threats are ever-evolving, Commend International stands as a beacon of security excellence. Our commitment to safeguarding critical infrastructures through Advanced Security Building Intercom Systems is unparalleled. At Commend, we ensure **Privacy and Security by Design (PSBD)**, embedding robust security measures from initial design to final implementation. Our **Defense-in-Depth Strategy** offers multi-layered protection against a wide array of cyber threats. Certified under **ISO/IEC 27001** and as the world's first intercom company to achieve **IEC 62443-4-1** certification, we uphold the highest standards of information security management. Explore how our thought leadership and technological innovations are setting new standards in Cyber Security.

TRUSTED. COMMUNICATION. ALWAYS.

trust.commend.com

COMPREHENSIVE CYBER SECURITY MEASURES

At Commend, we prioritize the security of our systems with a multi-faceted approach. Here are the key components of our robust cyber security strategy:



SYSTEM PROTECTION AND CYBER SECURITY

Users of our systems depend on their reliability – possibly even with their lives. At Commend, we have always been acutely aware of the resulting high level of responsibility. This applies also – and especially – to cyber security. With the growing trend towards networking and Internet connectivity, especially in industrial control and automation systems (ICS), facilities are increasingly becoming targets of cyber attacks. Security mechanisms are crucial as a result.



PRIVACY AND SECURITY BY DESIGN (PSBD)

To us, Privacy and Security by Design (PSBD) is more than a catchphrase. It ensures that security and privacy are integral from the initial design phase to the final implementation. This principle is vital for providing the best possible protection for both transferred data (e.g., audio/video streams) and data-at-rest (e.g., stored user or system data) against unauthorized access, ensuring the availability of products and services.



DEFENSE-IN-DEPTH STRATEGY

Our multi-layered defense strategy protects against a wide array of cyber threats:

- **Physical Security:** Robust devices, vandal-resistant versions, tamper detection for hardware, USB, and port-debugging protection.
- **Network Security:** IEEE 802.1x for authentication, IEEE 802.1q for VLANs, IP Secure Connector for automatic network interruption during tampering attempts, ensuring secure connections with advanced encryption and network segmentation.
- **Data Security:** Encrypted and authenticated communication, SIP over TLS v1.2, SRTP for encrypted voice data, X.509 certificates, TLS transport encryption for protocols like HTTPS, SIPS, and MQTTS.
- **Fail Safety:** Mandatory password changes on first login, minimum password length of 12 characters, brute-force attack detection, and documentation and securing of network ports.



CONTINUOUS IMPROVEMENT AND CERTIFICATIONS

Commend conducts regular vulnerability assessments and penetration tests, inviting external security experts to perform these tests. Our coordinated Security Advisories Programme values contributions from the security community. Automated updates, cloud-native failover strategies, and continuous publication of security patches ensure ongoing protection.



PARTNERSHIPS AND BEST-PRACTICE STANDARDS

To keep up with fast-paced technical developments, Commend maintains research and development partnerships with third-party manufacturers, security experts, and institutions such as SBA Research, while leveraging its membership in security-specific organizations like the Center for Internet Security (CIS).





THINKING EVERGREEN

ONCE COMMEND, ALWAYS COMMEND

One of the reasons why customers stay with Commend across generations is our Evergreen Technology, an integral part of our corporate genetics. After all, our principle of “Trusted. Communication. Always.” also applies to the sustained longevity of our products and systems. That’s not just wishful thinking but our solid promise, which we are keeping every day with very real products, solutions and services. Trust in the evergreen of sustainable communication: solutions by Commend that are built to last – safe and secure – for many (product) generations to come!

evergreen.commend.com



THE PROMISE OF OUR EVERGREEN PHILOSOPHY

Evergreen Technology keeps adding value throughout a Commend product's entire lifecycle. That's because communication without age restrictions will help you save costs without ever losing out on its benefits.

Benefit from the advantages of Commend Evergreen Technology:

- **INDUSTRY-LEADING TOTAL COST OF OWNERSHIP**

Benefit from unrivalled cost effectiveness and investment security that grows over the lifetime of the systems.

- **SMALL ECOLOGICAL FOOTPRINT**

Rely on a green communication solution that is not only economical, but also environmentally sustainable.

The Commend Evergreen Technology is based on:

Unrivalled backward compatibility & modernisation capability



With our products, you can rely on unmatched backward compatibility. Legacy devices are compatible with the latest system generations. The Commend IP Converter connects analogue devices from the 1980s to our cutting-edge VirtuoSIS server and Commend cloud services. Commend offers easy, step-by-step system upgrades to suit your needs. Thanks to various connection technologies, existing systems can be gradually upgraded to IP-based products using existing wiring via Commend IP Bridge adapters, avoiding the high costs of Ethernet wiring upgrades. Commend's backward compatibility and modernisation capability ensure low hardware replacement costs and economic budget maintenance throughout your system's life.

Regular software updates



Commend devices can leverage new features through software updates without replacing expensive hardware, ensuring secure connections. Cyber-security is integral to Commend's software development, protecting your data and systems from cyber-attacks and related costs. Our R&D engineers follow "Privacy and Security by Design" principles, using encryption and cryptography to strengthen our products. Regular security audits and external penetration tests identify vulnerabilities and allow timely code improvements, ensuring our products are secure from the ground up.

Sustainable product design



Commend emphasizes durability in product design by selecting high-quality, robust components for extreme temperatures and energy-efficient electronics. Extending the life of a product has a major impact on the sustainability of electronic products, which is why our products are designed to be repairable and we use recyclable materials wherever possible to minimise electronic waste.

Sustainability is crucial to us, and our recent ISO 14001 certification underscores our commitment to environmental management and supports our ongoing efforts to minimise our environmental impact.



INFORMATION PROVIDING SECURITY

BUILDING SOLUTIONS

It's part of every building operator's job to keep an eye on economic efficiency and profitability. After all, real estate is supposed to yield a profit. However, real estate operators also bear an enormous responsibility where security is concerned. We at Commend cannot prevent crises or rule out unforeseen events. But our communication systems help to make sure that everything works as required when an emergency does strike.

SAFETY AND PROTECTION FOR PEOPLE AND ASSETS

Building Communication by Commend helps people find their way, keeps them informed, assesses situations, raises alarms and assists in evacuations. It also helps to save unnecessary expenses while ensuring ultimate security and keeping downtimes as short as possible. A perfect solution for Emergency and Danger Response Systems (EDRS) in buildings with high security requirements, Commend provides full support for emergency and rescue plans as per IEC EN 62820-2 and IEC EN 62820-3-2.



CORPORATE BUILDINGS



PUBLIC ADMINISTRATIVE BUILDINGS



SCHOOLS AND UNIVERSITIES



HOSPITALS AND HEALTHCARE FACILITIES



SHOPPING MALLS



DATA CENTRES



PRISONS AND DETENTION CENTRES



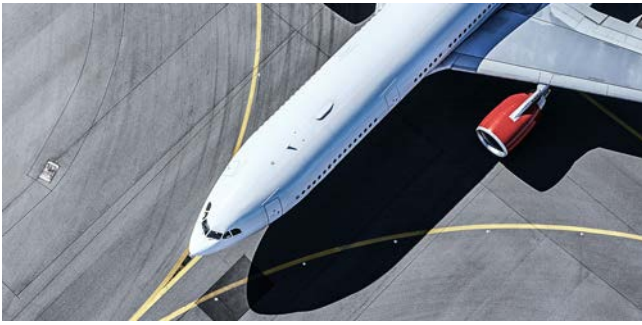
HELP AT THE PUSH OF A BUTTON

TRANSPORT & INFRASTRUCTURE

Wherever people are or wherever they go, they expect to be able to request instant help when they need it. On motorways or bridges, in tunnels or trains, in airports, railway stations and bus stations, Intercom call points for information and emergency purposes are an expected standard nearly everywhere – a service that needs to be reliably available.

INFORMATION, PROTECTION AND HELP

Commend provides information and emergency call solutions that deliver ultimate audio/video quality for use in public areas, as well as Control Desk solutions for command and control centres of emergency and rescue services. Commend Control Desk solutions makes it easy for control centre staff to assess a situation, communicate with first responders and get help to where it is needed as quickly as humanly possible.



AIRPORTS



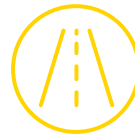
CAR PARKS



PUBLIC TRANSPORT



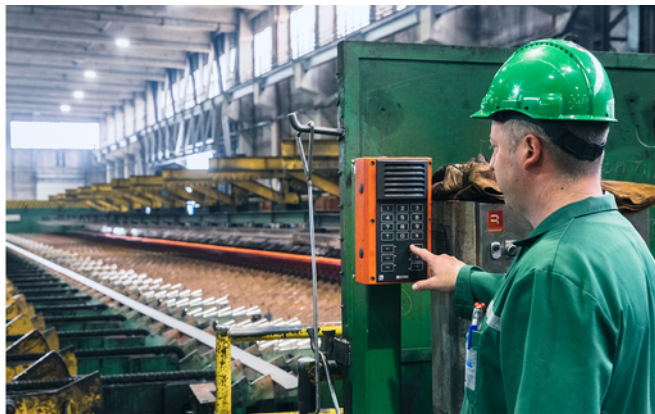
**SMART CITIES
AND CITY CENTRES**



**MOTORWAYS UND
TOLL STATIONS**



TUNNELS



SUPERIOR PERFORMANCE IN CHALLENGING ENVIRONMENTS

INDUSTRIAL COMMUNICATION

Our solutions are designed to improve our customers' operational communication, boost their workflow efficiency and profits, and keep their costs down through incident prevention and short reaction times.

CLEAR, TARGETED AND EFFECTIVE

On industrial premises and related facilities, employees must be able to rely on high-quality communication and Public Address, reliable emergency alarms, and on video support and control systems – solutions that must be designed from the ground up to withstand even extreme environmental conditions. It makes a big difference if a communication system is operated in the chemical or pharmaceutical industry, in a production setting or in a logistics environment. Special challenges require special solutions.

industry.commend.com



**MANUFACTURING
INDUSTRY**



**METAL INDUSTRY
AND MINING**



OIL AND GAS INDUSTRY



CHEMICAL INDUSTRY



**PHARMACEUTICALS
AND CLEAN ROOMS**



**ENERGY AND
PUBLIC UTILITIES**



LOGISTICS CENTRES



OGNIOS BY COMMEND

MARITIME COMMUNICATION

Ognios by Commend provides an IP-based communication solution that has been developed and designed specifically for the maritime market. On-board security is essential on any ship. The same goes for efficient communication, especially on larger vessels where face-to-face communication is often difficult and inefficient.

FIRST CHOICE FOR ON-BOARD COMMUNICATION

What makes the Ognios system unique is its wide range of customisation options. Thanks to the flexible design, users may fully integrate the Intercom station (e.g., into a bridge arrangement) or customise the layout to let it blend seamlessly into the ambient design (e.g., wood, steel, plastic or brass surfaces).

ognios.commend.com



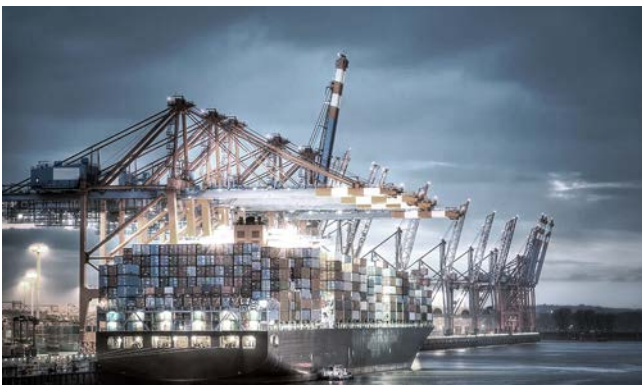
SUPERYACHTS



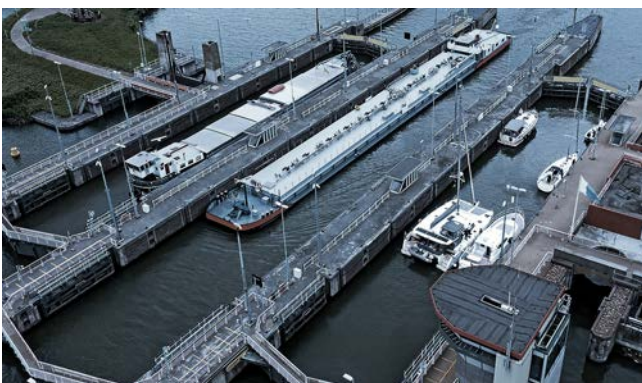
**PASSENGER SHIPS
AND FERRIES**



**WORKBOATS
AND VESSELS**



PORTS



**WATERWAYS
AND LOCKS**

” There is a solution for every customer need

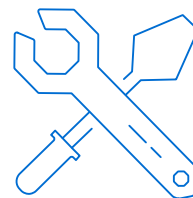


CUSTOM-TAILORED HARD- AND SOFTWARE CUSTOMIZED SOLUTIONS

Our promise: the proper solution for every customer requirement. In case our standard product portfolio does not cover your required solution, our team of hardware and software specialists will develop a tailored concept that meets your needs, and implement it in proven Commend quality.

WE BUILT IT, WE CODE IT...

- Custom-built Intercom stations
- Help Points, e.g., Emergency Call Stations
- Software Development Kit (SDK) for Studio by Commend
- User interfaces (e.g. for Industrial Control Desks or touch displays)
- Web-based user interfaces
- Interfaces to third-party systems
- and many more...



Contact your local Commend partner for further information.

commend.com/contact



THE INTERCOM PLATFORM

SYMPHONY BY COMMEND

Wherever you look these days, transformation and digitalisation are in full swing. New digital business models are bursting onto the market every day. Organisations of all sizes and industries want to share in the transformation. They are recognising and taking advantage of developments such as SMART HOME, SMART INDUSTRY, SMART WORK, SMART GRID or SMART CITY.

And they have upgraded their requirements accordingly, especially in terms of building technology, which is permeating deeper and deeper into architectural and organisational structures. The exchange, transmission, analysis, interpretation and visualisation of data is crucial to the success of these digital business models. Like the models, the technology that supports them has to undergo radical changes and reinvent itself to keep up.

SYMPHONY BY COMMEND – THE DIGITAL TRANSFORMATION OF INTERCOM AS WE KNEW IT

Commend has always been dedicated to reliability, consistent action and long-term durability. As a result, we won't shy away from taking an unconventional approach. However, this won't make the world of 'classic' Commend Intercom obsolete. On the contrary, we are committed to rebuilding and further developing its valuable existing parts to elevate them into the new world of digitalisation. We call it Symphony by Commend – the Intercom Platform.

SYMPHONY BY COMMEND

THE INTERCOM PLATFORM POWERED BY 'PRIVACY AND SECURITY BY DESIGN'

A platform that opens up a new world of possibilities and options, all directed towards a common goal. Providing outstanding, crystal clear, reliable communication wherever it can help to boost efficiency and safety.

Touch-operated intercom stations adapt to any application, whether in reception areas, as information terminals, or for internal communication. **Barrier-free** stations cater to individuals with visual and/or hearing impairments, offering visual user guidance via touch displays. **Customisation** is at the core of these solutions, with modules for bespoke stations serving as information terminals, help points, or **integrating** into components like barriers or ticket vending machines.

Vandal-resistant intercom stations are ideal for challenging areas, while sealed membrane surfaces ensure hygiene in clean rooms and labs. Efficient team communication is supported in all **industrial environments**, including hazardous areas, and exceptional communication is delivered on **yachts and ships**, designed to withstand any storm. **High-volume** sound capabilities, enhanced by Intelligent Volume Control (IVC) and robust networking technologies, highlight the excellence of **Unified PA** solutions.

Controlled and networked across the globe, Commend Control Desk solutions keep operators up to date and in full control of the system, enabling instant **intervention and response** in emergencies. Managing even complex intercom networks or **video and control functions** is seamless, both locally and across multiple sites worldwide.



SYMPHONY CLOUD

Symphony – the first-ever cloud-based Intercom platform built around the principle of ‘privacy and security by design’ – introduces a new era in building communication. Symphony conducts and coordinates digitally networked cloud services to enhance safety and efficiency in various environments, both in everyday situations and in emergencies.

SYMPHONY ON-PREM

VirtuoSIS, our fully software-based Intercom Server, is the solution of choice for on-premise arrangements. It runs in a variety of virtual software environments (VMware vSphere, Microsoft Hyper-V and Nutanix Acropolis) and also forms the core element of our S6 and S3 hardware servers.

DEVICES MANAGED BY SYMPHONY CLOUD

Symphony Cloud enables centralized device management. Devices, whether using Symphony On-Prem or Symphony Mesh, can be configured via the web interface or Set-Up Only. Firmware updates and device status monitoring are managed through the Symphony Cloud dashboard.

SYMPHONY BRIDGE

The Bridge lets on-premise servers connect to the Cloud to take full advantage of Cloud-powered services and mobile apps.

SYMPHONY MESH

Symphony devices combine into an intelligent autonomous communication network. They also integrate seamlessly with on-prem servers.



COMMEND SYSTEMS INTEGRATE SEAMLESSLY WITH LEADING THIRD-PARTY SOLUTIONS

Video / VMS / Security Suites	Audio / Public Address PAGA / PAVA	Access control for barriers and doors	Building management OPC / Modbus / KNX
VoIP/SIP Server	VoIP/SIP telephones and mobile phones	Public telephone network	Digital (TETRA/DMR) and analogue radio
Signal lights / Displays / Visual Alarms	Monitor inputs and control outputs	Sensors	SDK Individual interfaces and third-party systems



RELIABLE, CENTRALISED, CLASSIC

SYMPHONY ON-PREM

Decades of experience in Security Intercom have allowed us to rethink the basic challenges involved in 100% reliable communication solutions and work out new solutions. The central question is, How can our solutions provide the best possible support for operative organisational or business processes and reliable emergency response action plans – and what are the main criteria for security officers when it comes to selecting equipment and solutions?

With Commend Virtuosis, the world's first completely software-based Intercom server, our solutions integrate seamlessly into the flexible, dynamic world of virtual IT environments, where they bring all their benefits and technical talents to bear: ultimate functionality and business-critical high availability, the central hallmarks of Commend solutions.

All data are kept on the customer's premises (or in their data centre) within virtual server environments (VMware vSphere, Microsoft Hyper-V and Nutanix Acropolis).



AUTONOMOUS AND INTELLIGENT **SYMPHONY MESH**

Commend Intercom stations and Intercom modules of the latest “Symphony MX” and “Symphony BF” generation come with enough built-in intelligence to make a server unnecessary for some applications.

Networked in free direct interplay, they form an intelligent autonomous communication network that is cost-efficient and ideal for smaller-sized Intercom applications: Symphony Mesh. Superior voice sound quality and signal processing ensure ultimate speech intelligibility in everyday use as well as in challenging situations. While Symphony Mesh offers exceptional performance, it operates within a single network layer and does not extend beyond a single router, making it inherently simpler and more contained compared to traditional server systems.

Extensive Commend Intercom functionality provides features from call answering and forwarding to video, remote control, Unified PA, redundancy and others. These make it easy to custom build solutions to support operational and security-critical applications and processes.

Especially the unique so-called “action sequences” allow Commend IP devices to be programmed for functions and controls that would normally require a fair amount of server intelligence.



A POWERFUL CONNECTION

SYMPHONY BRIDGE

The Bridge opens the world of on-premise solutions to Symphony Cloud services such as the Symphony Mobile Client, the Symphony Web Client that provides convenient call management in a browser window, and Ivy, our Conversational AI-based Intercom Voice Assistant.

Combining both architectures enables all-new solutions that bring together the best of both worlds. Nowhere does innovation progress at a faster pace than in the Cloud. With Symphony On-Prem and Symphony Bridge, access to this world of new possibilities is just a click away.



CENTRALISED & SIMPLIFIED

SYMPHONY CLOUD MANAGED

Symphony Cloud simplifies device management with a unified web interface for seamless operations. Whether using Symphony On-Prem or Symphony Mesh, you can monitor device performance and manage firmware updates centrally, ensuring your network remains consistent and secure. Real-time status monitoring through the Symphony Cloud dashboard keeps you informed about the health of your devices at all times.

With Symphony Cloud, you streamline operations, reduce manual effort, and ensure optimal device performance.



HIGHLY AVAILABLE AND SECURE **SYMPHONY CLOUD**

The launch of Symphony – the world’s first cloud-based Intercom platform built around the principle of ‘Privacy and Security by Design’ – marks the beginning of a new era in communication.

With its innovative cloud services Symphony makes even complex solutions in demanding system environments secure and easy to manage. On-premise solutions based on Virtuosis find their way into the Cloud and its services over the Symphony Bridge. This way, they can take full advantage of services from Mobile Clients for smartphones and tablets to the browser-based Web Client.

Future cloud-based Symphony services will further raise the bar in terms of security and efficiency, especially by intelligently networking different sub-systems and functions such as video surveillance, sensors, emergency communication, access control, visitor management, and Ivy, our Conversational AI-based Intercom Voice Assistant.

At the core of the system, Symphony conducts and coordinates digitally networked cloud services to make various environments smarter and more secure, both in everyday situations and in an emergency.

SYMPHONY CLOUD WEB PLATFORM



Unleash the full potential of your communication systems with the Symphony Cloud Web Platform. Designed with flexibility and user-friendliness at its core, our platform seamlessly integrates and manages your network of devices, ensuring superior performance and effortless control. Whether you are managing a corporate office, a residential complex, or any other facility, Symphony Cloud Web Platform provides you with the tools to enhance security, streamline operations, and improve user experience – all through a convenient web interface.

SYSTEM MANAGEMENT

- Account Management: Keep a comprehensive project overview for system integrators and administrators.
- System and Project Assignment: Quickly reassign systems and projects to other companies or users, such as during ownership or management changes.
- System Structures and Hierarchies: Organise regions, locations, and buildings with Company, Project, and Site folders.
- Automatic Device Detection: Easily discover devices within your local network using the Symphony Mobile Client.
- Configuration: Securely add and configure Intercom stations with claim codes before on-site installation.
- Ownership and Administration Sharing: Flexibly transfer ownership and admin rights, e.g., from integrator to owner or when property managers change.
- Dashboard and Monitoring: Centralised hub for monitoring users, devices, and projects with real-time status and firmware information.

CALL MANAGEMENT

- Call Scenarios: Manage call scenarios by creating contacts, organising them into ring groups and connecting them with call buttons.
- Call Forwarding Rules: Configure call forwarding for specific days, dates, and times.
- VoIP Reports: Access detailed reports on system-wide call activity.

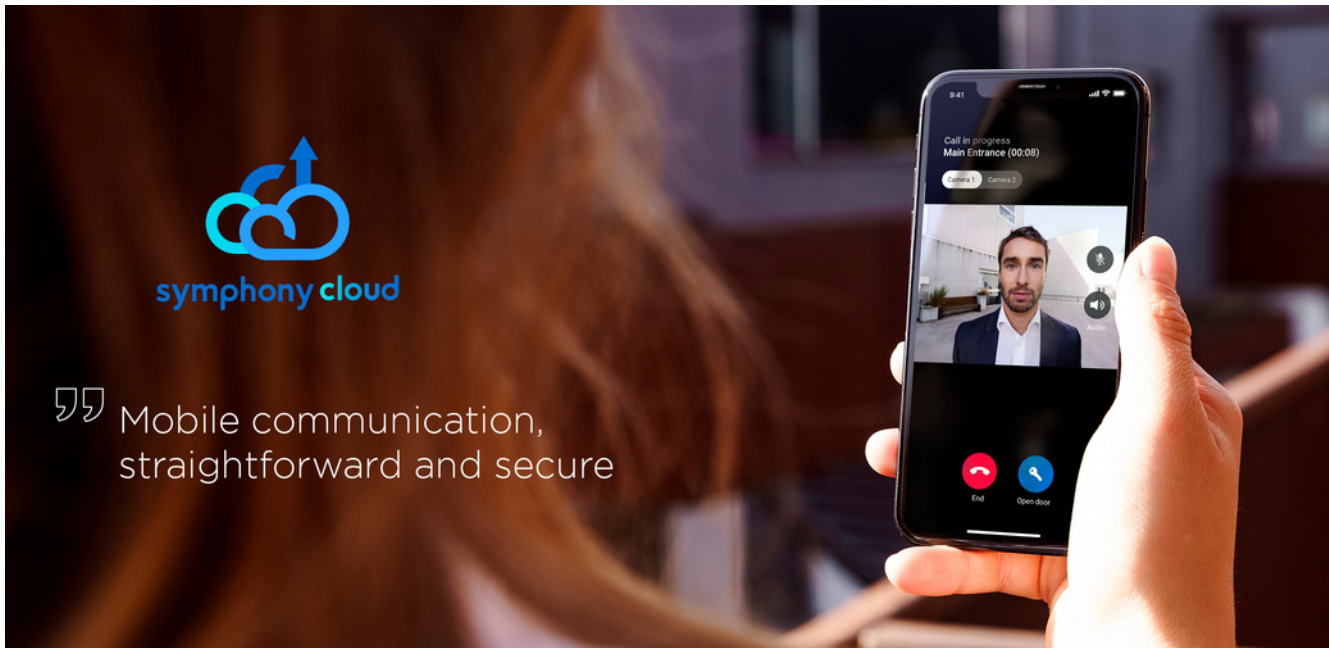
DEVICE MANAGEMENT

- Centralized Device Management: Manage all claimed devices, including mobile and web clients.
- Status Monitoring: Monitor device status, signaling, and configurations.
- Firmware Updates: Perform automatic, security-critical, or manual firmware updates.
- Service Access Sharing: Share service access and device ownership within teams.
- Device Configuration (Cloud Devices): Customise device names, configure door openers and manage call buttons for claimed devices operated and managed in Symphony Cloud.
- Cloud-Managed Devices (Mesh/On-Prem): Provides monitoring and firmware updates for devices managed via Symphony Cloud.

USER MANAGEMENT

- User Management: Manage users assigned to Web Clients
- Role Management: Separate roles for owners, administrators and viewers.
- User Access Levels: Manage user access at the company, project, or site level.
- Temporary Access Rights: Grant temporary access for maintenance and support.

SYMPHONY MOBILE CLIENT



” Mobile communication,
straightforward and secure

Commend's Symphony Mobile Client is a Symphony service designed for buildings such as corporate offices and business complexes. The Symphony Mobile Client simplifies everyday tasks for employees and building managers while reducing management expenses for building owners.

Door calls can be answered and doors can be unlocked conveniently via smartphone. The app's short response times and the ability to display the camera feed directly in the push notification allow recipients to react immediately to calls. In case a visitor leaves, the central visitor log provides a snapshot of the caller.

Everything can be handled online – either in the app, or via the web browser's management dashboard. This way, the service ensures ultimate flexibility and security.

KEY FEATURES:

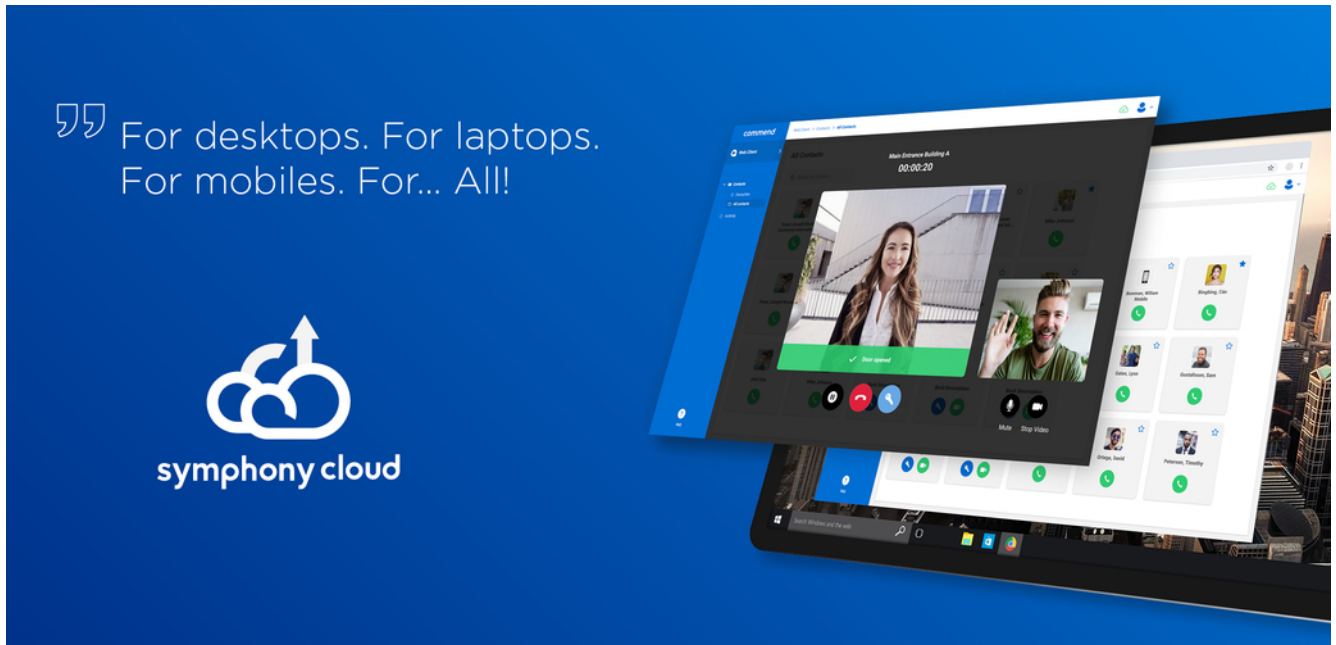
- Convenient answering of door calls via smartphone and opening doors
- Direct access to preferred contacts via Favourites on the home screen
- Bi-directional video calls
- Quick access to functions, either directly in the push notification or via widget functions
- Central call history with snapshots of visitors who have left – even for calls received while the smartphone is offline
- Customisable do-not-disturb function to avoid interruptions during important moments
- Easily integrate third-party cameras for providing greater flexibility and enhanced security options
- Easy management of users via app or web browser
- No need for manual replacement of name labels on door bell name plates
- New users can be added easily via QR codes and magic links
- Quick and easy to set up, thanks to features such as Intercom station auto-discovery
- Designed with a focus on security and data protection
- The Door Opener function can be secured via PIN, Touch ID or FaceID authentication

Learn more about Symphony:

symphony.commend.com



SYMPHONY WEB CLIENT



For desktops. For laptops.
For mobiles. For... All!

The Symphony Web Client is probably the world's most flexible, most easy to use Intercom station – and it doesn't even need any extra software! No matter whether you're in your office, your home office or on the move – just answer your door calls at any time, wherever you are. The clean UI lets users view their contacts, define favourites for quick access to key contacts, and maintain an overview of events thanks to the call history. And with extended call centre functions like call waiting or call forwarding, handling incoming calls is child's play.

KEY FEATURES:

- Convenient answering of door calls within the web browser
- Worldwide access via login at <https://webclient.commend.services>
- Bi-directional video calls
- Independent of the device type: suitable for desktops and laptops
- Independent of the operating system used: supports Windows, macOS and Linux
- Central call history with snapshots of visitors who have left – even for calls received while the Web Client is offline
- Display of a video feed during calls
- Easy control and operation of signal outputs, such as door openers, gates, and barriers
- Call centre functions, such as call queue, call transfer and pause options
- Separate role "Web Client user".
- Easy onboarding of new users through an email.

Learn more about Symphony:
symphony.commend.com

IVY VIRTUAL ASSISTANT



“Hello, I’m ivy

The world’s first Conversational
AI-based Intercom Voice Assistant



In today’s fast-paced workplace, efficiency and speed are key to business success. Commend’s Ivy Virtual Assistant is designed to streamline operations through advanced automation and seamless communication capabilities. Ivy works as an integral part of any team, optimising workflows and automating tasks to free up valuable time for strategic work. Increase productivity, reduce costs and improve business practices in the digital age with Ivy.

KEY FEATURES:

- 24/7 support: At any time of the day or night, Ivy is ready to respond to enquiries and provide support
- Seamless integration: Ivy easily integrates with existing enterprise systems and connects to multiple communication channels
- Automate routine tasks: Ivy can handle empty call management, wayfinding, parking assistance, and smart city solutions, allowing the team to focus on more important calls.
- Natural conversation in multiple languages: Ivy supports seamless, intuitive interactions in various languages.
- Ivy Dashboard: Tracks key performance metrics, provides visual insights, and offers detailed conversation analytics, ensuring data protection compliance.
- Ivy Captions: Enhances communication by transcribing spoken responses onto the screen, ensuring clarity in noisy environments and helping users easily follow directions and information.
- Advanced analytics: Detailed insights and reports to improve business decisions and optimize processes, including instant call history with conversation transcripts and audio playback for call validation.
- Privacy and security: With advanced security protocols, Ivy protects data and ensures compliance with privacy standards
- Possible connection with external services such as public transport and traffic services, weather, and potentially parking or access management systems

Learn more about Symphony:
symphony.commend.com



SIA AWARD
WINNER 2023

iSC WEST/LAS VEGAS

LICENCES FOR SYMPHONY CLOUD SERVICES

BASIC LICENCES - SYMPHONY CLOUD



E-CC-CTF

Licence for 1 Symphony Cloud Subscriber unit (Symphony Device, Symphony App or Symphony Web Client)

LICENCES - IVY VIRTUAL ASSISTANT



IVY VIRTUAL ASSISTANT

Licences related to specific business cases or use cases are available upon request.

INTERCOM STATIONS – SERIES CONCERTO



“ A concert of security and efficiency

The Concerto series of Intercom stations is the first of its kind worldwide to provide an “Emergency Mode”. The Concerto stations combine security, communication, design and functionality to offer the best of all worlds. They come fully equipped to support everyday workflows, and especially to ensure security in crisis situations.

These high-quality Intercom stations are made from refined materials such as glass, high-grade steel and aluminium. Thanks to their timeless design, they are ideally suited for use as multi-functional Intercom solutions with built-in security mode for modern buildings – especially for reliable emergency and threat reaction in buildings, and for solutions centred around ‘Advanced Security Building Intercom’ (ASBIS), as per EN 62820-2.

KEY FEATURES:

- Intercom stations for outdoor and indoor environments
- High-quality sheet glass or high-grade steel front panel and aluminium frame
- Integrated high-resolution wide angle colour video camera
- Daylight-ready multi-touch displays with brilliant colour reproduction
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 20 kHz uHD Voice speech quality
- Quick and easy to configure via Web Interface
- Easy expansion options via USB port



W × H (mm)

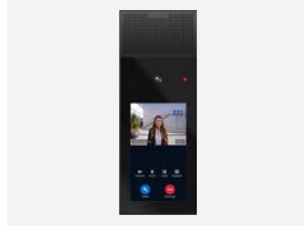
od10	175 × 325
od5	86 × 228
od1	86 × 228
id5	86 × 228

INDOOR INTERCOM STATIONS WITH TOUCH DISPLAY – SERIES ID5



ID5 TD CM

Indoor Intercom Station with 5-inch touch display and camera



ID5 TD CM-B

Indoor Intercom Station with 5-inch touch display and camera – black



ID5 TD

Indoor Intercom Station with 5-inch touch display

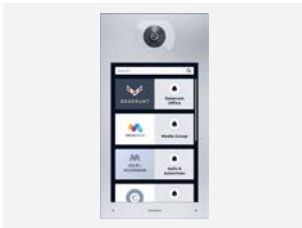


ID5 TD-B

Indoor Intercom Station with 5-inch touch display – black

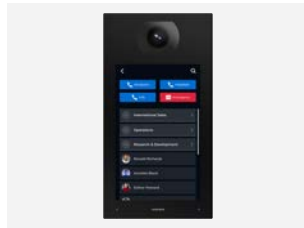


OUTDOOR INTERCOM STATION WITH TOUCH DISPLAY – SERIES OD10 | OD5



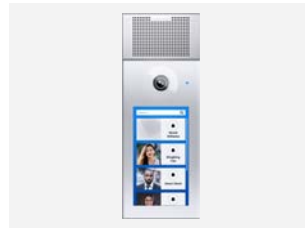
OD10 TD CM

Outdoor Intercom station with 10-inch touchscreen display and camera



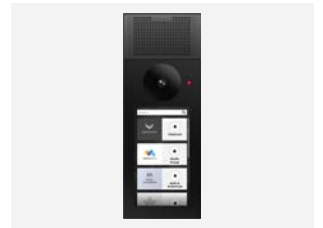
OD10 TD CM-B

Outdoor Intercom station with 10-inch touchscreen display and camera – black



OD5 TD CM

Outdoor Intercom Station with 5-inch touch display and camera



OD5 TD CM-B

Outdoor Intercom Station with 5-inch touch display and camera – black



OUTDOOR INTERCOM STATIONS - SERIES OD1



OD1

Outdoor Intercom Station with one call button and backlit status pictograms



OD1 CM

Outdoor Intercom Station with camera, one call button and backlit status pictograms



OD1-B

Outdoor Intercom Station with one call button and backlit status pictograms - black



OD1 CM-B

Outdoor Intercom Station with camera, one call button and backlit status pictograms - black



OD1 V

Outdoor Intercom Station with one call button and V4A stainless steel front panel



OD1 V CM

Outdoor Intercom Station with camera, one call button and V4A stainless steel front panel



CONCERTO CONTROL DESK SYSTEM - SERIES ID8



Discover the innovative Concerto Control Desk System with 8-inch touch display - Series id8, full details see page 73



EXPANSION MODULES - SERIES CONCERTO



OD10 FBDUR

Dummy module for RFID access readers for Series od10 Intercom stations



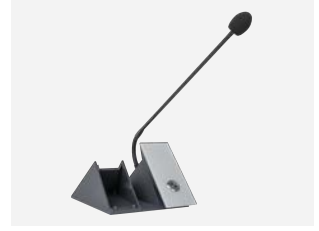
XDX FBDUR

Dummy module for RFID access readers for Series id5, od1 and od5 Intercom stations



ID5 DKHS

Desktop Kit with handset for Series id5 Intercom Stations



ID5 DKGM

Desktop Kit with gooseneck microphone and call button for Series id5 Intercom Stations



ID5 DKHSGM

Desktop Kit with handset and gooseneck microphone with talk button for Series id5 Intercom Stations



ID5 WMHS

Handset module for wall mounting, with USB connection



AFIL USB

Audio induction loop extension kit for transmission of audio signals to hearing aids; suitable for Intercom stations with USB port



PA25WPoE-DC

25 Watt PoE Injector, input: 24-48 VAC, optimised for Series WS & Concerto Mounting Kits



EB3E2A-AUD

I/O Extension Module with audio interface port for Intercom Stations with USB port, optimised for Series WS and Concerto mounting kits



IP-CON

IP Security Switchbox for secure connection between an Intercom station, network and Door Opener



POE-SPLIT

PoE-Split Power Adapter, input: PoE (15,4/30/60 W), output: PoE+ (30 W) and 12VVDC (19 W)



POE-SPLIT-M

Mounting kit for one PoE-Split Power Adapter POE-SPLIT



IP-BRIDGE

IP converter box with metal housing for extending the Ethernet network via 2-wire connections



EB1E1A

USB I/O Extension Module for Intercom Stations with USB port



EB8E8A

I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail



DINRAIL150

Top-Hat DIN Rail kit for mounting of modules designed for top hat rail mounting; length: 150 mm

ACCESSORIES - SERIES CONCERTO



OD10 SH

Mounting Kit with sabotage detection contact, made from powder coated sheet steel, for surface mounting of Series od10 Intercom Stations



OD10 FB

High-grade steel Mounting Kit for cavity wall mounting and flush mounting of Series od10 Intercom Stations



OD10 FBS

High-grade steel Mounting Kit for installing Series od10 Intercom Stations on brick walls; final installation requires Flush Mount Kit OD10 FB.



XDX SHID

Mounting Kit for surface mounting of Series id5, od1 and od5 Intercom Stations



XDX SH

Mounting Kit made from powder coated sheet steel, for surface mounting of Series id5, od1 and od5 Intercom stations



XDX SHE

Extended surface-mount kit made of powder-coated sheet steel, for mounting Series id5, od1 and od5 Intercom stations



XDX SHMM

Mounting kit made of powder-coated sheet steel, for door frame mounting of Series id5, od1 and od5 Intercom stations, for final mounting an additional surface-mount kit XDX SH or XDX SHE is required



XDX FB

Mounting Kit for cavity wall mounting and flush mounting of Series id5, od1 and od5 Intercom stations



XDX FBS

Mounting Kit for installing Series id5, od1 and od5 Intercom stations on brick walls; final installation requires Flush Mount Kit XDX FB



TAMP-KIT

Tamper contact for Series id5 and od5 Intercom stations



ID5 DKAD

Desktop Kit with adjustable tilt angle for Series id5 Intercom Stations



ID5 DK

Desktop Kit for Series id5 Intercom stations

VANDAL RESISTANT INTERCOM STATIONS

🔒 Highest protection
for malicious damage



Wanton destruction is a frequent occurrence in certain areas. These Intercom stations are protected against vandalism by durable high-grade steel front panels, a poke protection mechanism and special screws. The durable design prevents water, dirt and dust from entering the device. A continuous function check ensures reliable availability around the clock.

KEY FEATURES:

- Vandalism-resistant Intercom Stations for outdoor and indoor environments
- Front panel, 3 mm high-grade steel
- Poke protection and special screws
- Intercom Stations with integrated video camera
- Backlit call buttons and label fields
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 20 kHz uHD Voice speech quality
- Expansion modules for even more functions



W × H (mm)

WS V	164 × 279
WS V ½	164 × 139
EF	110 × 151

VANDAL RESISTANT INTERCOM STATIONS – SERIES WS 300V | 200V



WS 301V CM

Vandal resistant Intercom station with camera and one call button with label area



WS 303V CM

Vandal resistant Intercom station with camera and three call buttons with label areas



WS 201V I CA

Vandal resistant Intercom station with IP network camera and one call button with label area



WS 203V I CA

Vandal resistant Intercom station with IP network camera and three call buttons with label areas



WS 201V I

Vandal resistant Intercom station with one call button and label area



SIP-WS 201V

Vandal resistant Intercom station with one call button and label area



WS 201V D

Vandal resistant Intercom station with one call button and label area



WS 203V I

Vandalism-resistant Intercom station with three call buttons and label areas



SIP-WS 203V

Vandal resistant Intercom station with three call buttons and label areas



WS 203V D

Vandal resistant Intercom station with three call buttons and label areas



VANDAL RESISTANT INTERCOM STATIONS - SERIES WS 800V



WS 800V I

Vandal resistant Intercom station with LC display, full keypad and function keys



SIP-WS 800V

Vandal resistant Intercom station with LC display, full keypad and function buttons



WS 800V D

Vandal resistant Intercom station with LC display, full keypad and function keys



VANDAL RESISTANT ADA/DDA COMPLIANT INTERCOM STATIONS - SERIES WS 311V DA | WS 211V DA



WS 311V CM DA

Vandal resistant ADA/DDA compliant Intercom station with camera, call button and induction loop amplifier



WS 211V I DA

Vandal resistant ADA/DDA compliant Intercom station with call button and induction loop amplifier



SIP-WS 211V DA

Vandal resistant ADA/DDA compliant Intercom station with call button and induction loop amplifier



WS 211V D DA

Vandal resistant ADA/DDA compliant Intercom station with call button and induction loop amplifier

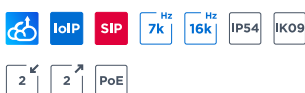


VANDAL RESISTANT INTERCOM STATIONS - SERIES EF 962 | EF 862



EF 962H

Vandal resistant Intercom station with call button

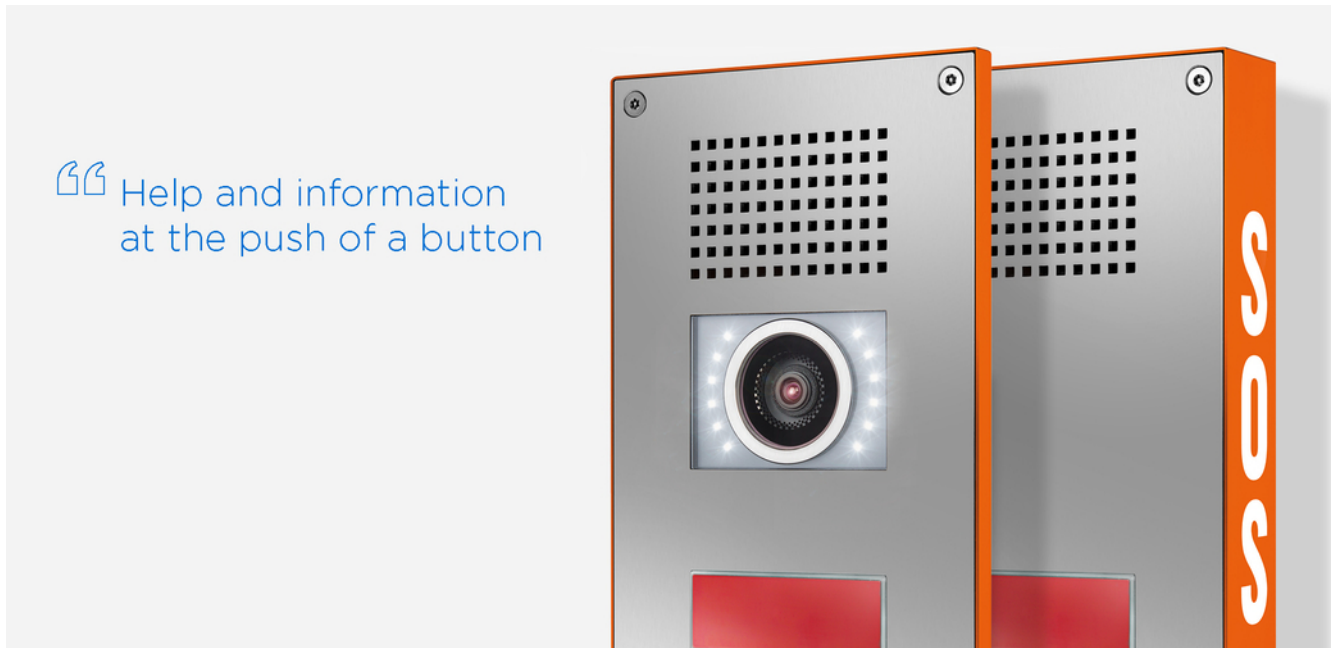


EF 862A

Vandal resistant Intercom station with call button



VANDAL RESISTANT EMERGENCY CALL STATIONS



Help and information
at the push of a button

These vandalism-resistant Intercom stations have many uses. In public areas they serve as information and emergency call station for passers-by, enabling them to request information and assistance in cases of emergency. The underlying technology ensures excellent speech quality and clarity, regardless of the ambient noise level. A continuous function check ensures the device's reliable availability. The extremely durable high-grade steel front plates with poke protection and special screws protect the unit against vandalism. The durable design prevents water, dirt and dust from entering the device. The extra large emergency call buttons are easily visible even over larger distances. They are easy to activate reliably in case of an emergency.

KEY FEATURES:

- Vandalism-resistant Emergency Call Stations for outdoor and indoor environments
- Front panel, 3 mm high-grade steel
- Poke protection and special screws
- Intercom Stations with integrated video camera
- Backlit call buttons and label fields
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 20 kHz uHD Voice speech quality
- Expansion modules for even more functions



W × H (mm)

WS V	164 × 279
WS V ½	164 × 139
EF	110 × 151

VANDAL RESISTANT EMERGENCY CALL STATIONS - SERIES WS 310V | WS 210V



WS 311V CM

Vandal resistant Emergency call station with camera and emergency call button



WS 211V I CA

Vandal resistant Emergency call station with IP network camera and emergency call button



WS 211V I

Vandal resistant Emergency call station with emergency call button



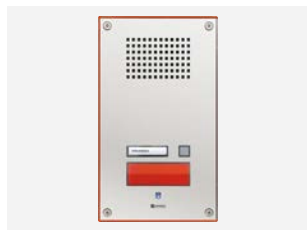
SIP-WS 211V

Vandal resistant Emergency call station with emergency call button



WS 211V D

Vandal resistant emergency call station with emergency call button



WS 212V I

Vandal resistant Emergency call station with emergency call button and one regular call button with label area



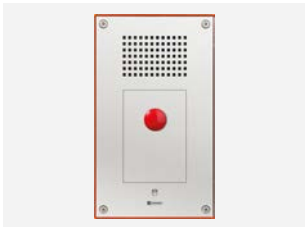
SIP-WS 212V

Vandal resistant Emergency call station with emergency call button and one regular call button with label area



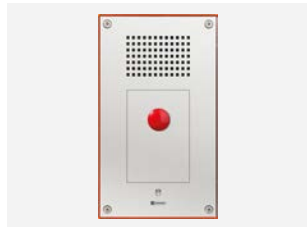
WS 212V D

Vandal resistant Emergency call station with emergency call button and one regular call button with label area



WS 211V I M

Vandal resistant Emergency call station with emergency call button (mushroom button)



WS 211V D M

Vandal resistant Emergency call station with emergency call button (mushroom button)



VANDAL RESISTANT EMERGENCY CALL STATIONS - SERIES EF 962M | EF 862M



EF 962HM

Vandal resistant emergency call station with emergency call button (mushroom button)



EF 862AM

Vandal resistant Emergency call station with emergency call button (mushroom button)



EXPANSION MODULES - SERIES WS V



WSLM 52V

Vandal resistant, active 2-Watt Loudspeaker Module



WSLM 56V

Vandal resistant, active 6-Watt Loudspeaker Module



WSDU 52V TW

Vandal resistant dummy module with transparent viewing panel



WSDU 52V AM

Vandal resistant dummy module with access reader symbol



WSIL 50V

Vandal resistant module with audio induction loop amplifier



WSDD 53V

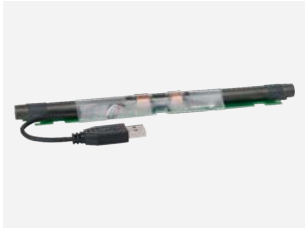
Vandal resistant module with three call buttons and label areas



WSDD 59V

Vandal resistant module with nine call buttons and label areas





AFIL USB

Audio induction loop extension kit for transmission of audio signals to hearing aids; suitable for Intercom stations with USB port



PA25WP0E-DC

25 Watt PoE Injector, input: 24-48 VAC, optimised for Series WS & Concerto Mounting Kits



EB3E2A-AUD

I/O Extension Module with audio interface port for Intercom Stations with USB port, optimised for Series WS and Concerto mounting kits



IP-CON

IP Security Switchbox for secure connection between an Intercom station, network and Door Opener



POE-SPLIT

PoE-Split Power Adapter, input: PoE (15,4/30/60 W), output: PoE+ (30 W) and 12VVDC (19 W)



POE-SPLIT-M

Mounting kit for one PoE-Split Power Adapter POE-SPLIT



IP-BRIDGE

IP converter box with metal housing for extending the Ethernet network via 2-wire connections



EB1E1A

USB I/O Extension Module for Intercom Stations with USB port



EB8E8A

I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail



DINRAIL150

Top-Hat DIN Rail kit for mounting of modules designed for top hat rail mounting; length: 150 mm

ACCESSORIES - SERIES WS V



WSFB 50V SS

Mounting Kit for flush mounting of Series WS V Intercom stations and extension modules; levelling frame: stainless steel-like finish



WSFB 50V OR

Mounting Kit for flush mounting of Series WS V Intercom stations and extension modules; levelling frame: RAL 2004



WSFB 50V FL

Mounting Kit for precise flush mounting of Series WS V Intercom Stations and expansion modules



WSFB 50V SS MC

Mounting Kit for precise flush mounting of Series WS V Intercom Stations and expansion modules for metal cabinets/pillars/facades; levelling frame: stainless steel



WSSH 50V SS

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: stainless steel



WSSH 50V OR

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: RAL 2004



WSSH 50V OR EM

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: RAL 2004, with "SOS" labelling



WSSH 50V YL EM

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: RAL 1016 with "HELP" label



WSSH 52V SS

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: stainless steel; half-height



WSFB 52V SS

Mounting Kit for flush mounting of Series WS V Intercom stations and extension modules; levelling frame: stainless steel-like finish, half-height



WSFB 52V SS MC

Mounting Kit for precise flush mounting of Series WS V Intercom Stations and expansion modules for metal cabinets/pillars/facades; levelling frame: stainless steel, half-height



WSSH 60V SS

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: stainless steel; one and a half height;

ACCESSORIES - SERIES WS V



WSSR 50V

High-grade steel Rain Protection Roof for Series WS V Intercom Stations; provides enhanced protection against environmental influences



WSSK 50V SH

Micro switch for tamper detection in surface-mounted Series WS V expansion modules; not suitable for WSLM 56V, WSLM 52V and WSD-DV59V



WSSK 50V FB

Micro switch for tamper detection in flush-mounted Series WS V expansion modules; not suitable for WSLM 56V, WSLM 52V and WSD-DV59V



RJ45-MONT

Ethernet Adaptor for fastening a rigid connection cable into a Mounting Kit; length: 0.3Vm

ACCESSORIES - SERIES EF 962 | EF 862



GUEF 62

Basic casing for surface mounting and flush mounting of Series EF 862 Intercom Stations, hot-galvanised sheet steel



GUEF 962

Basic casing with RJ45 adapter for surface mounting and flush mounting of Series EF 962 Intercom Stations, high-grade steel



EF 92G

Surface-mounting frame with rain protection roof for Series EF 862 and EF 962 Intercom Stations; RAL 9006 (grey)



EF 62O

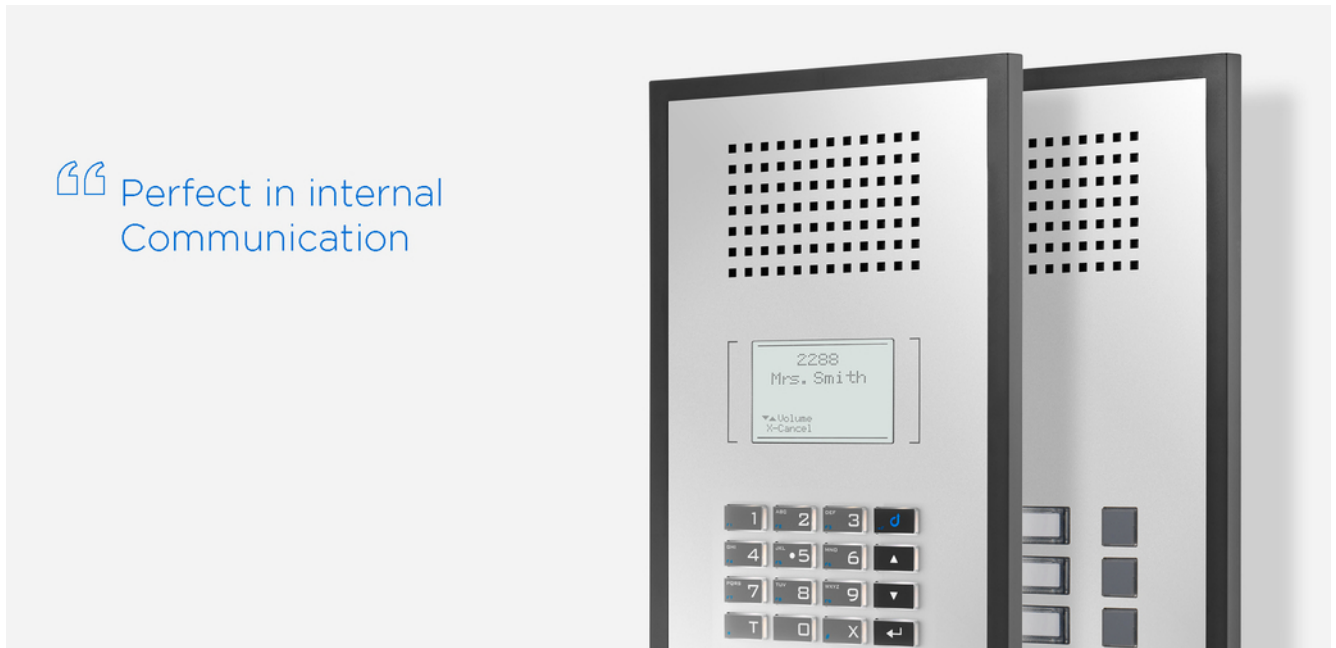
Surface-mounting frame with rain protection roof for Series EF 862 and EF 962 Intercom Stations; RAL 2004 (pure orange) with "SOS" labelling



EF 62NIRO

Surface-mounting frame with rain protection roof for Series EF 862 and EF 962 Intercom Stations; frame: stainless steel

WALLMOUNT INTERCOM STATIONS



Multi-functional Master Stations and Substations for indoor and out door environments, made from durable polycarbonate. In addition to communication, the stations also enable the control of other systems.

KEY FEATURES:

- Intercom Stations for outdoor and indoor environments
- Casing made from robust high-grade polycarbonate
- Intercom stations with LC display
- Backlit full keypad and function keys
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Expansion modules for even more functions



W × H (mm)

WS P 165 × 280

WS P ½ 165 × 140

WALLMOUNT STATIONS – SERIES WS 800P



WS 800P I

Wallmount Intercom Station with LC display, full keypad and function keys



SIP-WS 800P

Wallmount Intercom Station with LC display, full keypad and function keys



WS 800P D

Wallmount Intercom Station with LC display, full keypad and function keys



WALLMOUNT STATIONS – SERIES WS 200P



WS 201P I CA

Wallmount Intercom station with IP network camera and one call button with label area



WS 203P I CA

Wallmount Intercom Station with IP network camera and three call buttons with label area



WS 201P I

Wallmount Intercom Station with one call button and label area



SIP-WS 201P

Wallmount Intercom station with one call button with label area



WS 201P D

Wallmount Intercom Station with one call button and label area



WS 203P I

Wallmount Intercom Station with three call buttons and label areas



SIP-WS 203P

Wallmount Intercom station with three call buttons and label areas



WS 203P D

Wallmount Intercom Station with three call buttons and label areas



EXPANSION MODULES – SERIES WS P



WSDU 52P TW

Dummy module with transparent viewing panel, half height format

IP66



WSDU 52P AM

Dummy module with access reader symbol, half height format

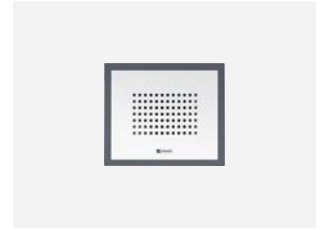
IP66



WSIL 50P

Expansion Module with Audio Induction Loop Amplifier, half height format

IP66



WSLM 52P

Active 2-Watt Loudspeaker Module, half height format

IP66



WSDU 52P

Dummy module, half height format

IP66



WSDU 50P

Dummy module, full height format

IP66



WSLM 56P

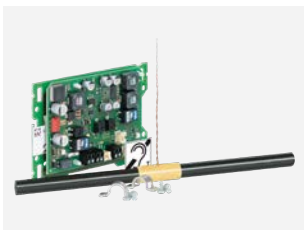
Active 6-Watt Loudspeaker Module

IP66



WSHS 50P-JST

Expansion module with handset and "Push to talk" button



WSEB IL

Audio Induction Loop Extension Kit for transmission of audio signals to hearing aids



AF 20A EB

20 Watt Amplifier module without housing

A

WALLMOUNT STATIONS WITH HANDSET FUNCTION – SERIES EE 320



EE 320AS

Intercom Wallmount Station with LC display, full keypad and function keys; black

EE 320AG

Intercom Wallmount Station with LC display and full keypad – light grey

EE 320AR

Intercom Wallmount Station with LC display, full keypad and function keys; bright red

D 16k Hz

MEMBRANE-PROTECTED INTERCOM STATIONS

Sealed surface for even better protection



This range of multi-functional master stations has been developed specifically for industrial, clean-room and medical environments. Despite their sealed membrane surface, these stations provide convenient, efficient communication in excellent speech quality. These Intercom stations are protected against dust, dirt and water jets. The special protective membrane that covers the front panel is dirt-resistant and can be cleaned quickly and easily with regular over-the-counter detergents and disinfectants. Large membrane keys ensure ease of use when wearing protective gloves. A built-in amplifier provides the necessary sound volume in areas with high ambient noise levels.

KEY FEATURES:

- Fully membrane-sealed surface, resistant against disinfectants
- Casing made from robust high-grade polycarbonate
- Intercom stations with LC display
- Backlit full keypad and function keys
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Expansion modules for even more functions



W × H (mm)

WS F	165 × 280
WS F ½	165 × 140

MEMBRANE-PROTECTED INTERCOM STATIONS – SERIES WS 800F



WS 800F I

Wallmount Intercom Station with sealed membrane surface, LC display, full keypad and function keys



SIP-WS 800F

Wallmount Intercom Station with sealed membrane surface, LC display, full keypad and function keys



WS 800F D

Intercom Wallmount Station with sealed membrane surface, LC display, full keypad and function keys



SIP-WS 800F MD

Wallmount Intercom Station for medical and clean room environments, with LC display, full keypad and function keys

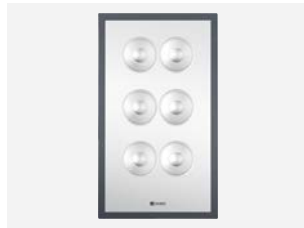


EXPANSION MODULES – SERIES WS F



WSLM 52F

Active 2-Watt Loudspeaker Module with sealed membrane surface, half height format



WSLM 56F

Active 6-Watt Loudspeaker Module with sealed membrane surface





WSFB 50P

Mounting Kit for flush mounting of Series WS P/F Intercom Stations and extension modules



WSFB 52P

Mounting Kit for flush mounting of Series WS P/F extension modules; format: half-height



WSSH 50P

Mounting Kit for surface mounting of Series WS P/F Intercom stations and extension modules



WSSH 52P

Mounting Kit for surface mounting of Series WS P/F extension modules; format: half-height



WSSH 54P

Surface-Mount Kit for Handset Module WSHS 50P-JST; format: half-width



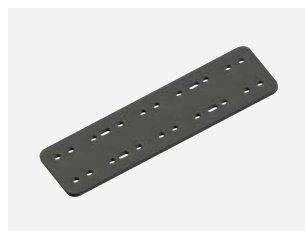
WSDM P

Tool for easy opening of Series WS P/F Intercom Stations



WSDK 50P

Desktop Kit for Wallmount Stations and Expansion Modules with surface-mount box for Series WS P/F; suitable also for tilted installation on wall surfaces



WSCP 50P SH

Connector Kit for fixed linking of two WS P/F surface-mount boxes



RJ45-MONT

Ethernet Adaptor for fastening a rigid connection cable into a Mounting Kit; length: 0.3Vm

DESKTOP INTERCOM STATIONS

Timelessly ergonomic
for an efficient environment



The Desktop Intercom Stations feature a timelessly stylish, ergonomic design that fits in with any modern working environment. Menu functions allow the user to scroll through a directory of names or a list of functions and apply the required function directly. Special versions with noise compensating gooseneck microphone and tilt protection cover the range of everyday requirements in modern control rooms.

KEY FEATURES:

- Substations, Master Stations and Control Desk Stations
- Intercom Stations with backlit LC display
- Backlit full keypad and function keys
- OpenDuplex® for natural, hands-free communication
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Multi-functional LED for visual user guidance
- 3-D gravity sensor for switching functions such as handset function or privacy mode



W × H × D (mm)

EE 900	66 × 58 × 240
EE 800	66 × 58 × 240
EE 300	66 × 55 × 230
Gooseneck microphone	L 400 mm

DESKTOP INTERCOM STATIONS - SERIES EE 900 | EE 800



EE 900AS

Intercom Master and Control Desk Station with LC display, full keypad and function keys; black



EE 972AS

Master and Control Desk Intercom Station with LC display, full keypad and function keys; black



EE 811A

Intercom Master and Control Desk Station with LC display, full keypad and function keys; black



EE 872AS

Master and Control Desk Intercom Station with LC display, gooseneck, full keypad and function keys; black



EE 872AEGS

Master and Control Desk Intercom Station with add-on loudspeaker, gooseneck microphone, LC display, full keypad and function keys; black



ACCESSORIES - SERIES EE 900



PA15WPOE

15 Watt PoE Injector, input: 100-240 VAC, with exchangeable plugs (AU/EU/UK/US)



ASKKAT5-3S

Network cable, Cat. 5, shielded; length: 3.0 m

DESKTOP STATIONS - SERIES EE 300 | EF 300



EE 311AS

Intercom Master Station with LC display and full keypad - black



EE 311AG

Intercom Master Station with LC display, full keypad and function keys; light grey



EE 301AS

Intercom Master Station with LC display and full keypad, without position switch and handset port; black



EE 301AG

Intercom Master Station with LC display and full keypad, without position switch and handset port; light grey



EE 372AS

Master and Control Desk Station with gooseneck microphone, LC display and full keypad; black



EF 311AS

Substation with three buttons (T, O, X), black



ACCESSORIES - SERIES EE 300 | EF 300



PA24W15V-CA

24 Watt plug-in power supply unit, input: 100-240 VAC with exchangeable plugs (AU/EU/UK/US), output: 15 VDC with angled barrel connector; cable length: 2.0 m



EW 401S

Wall-Mount Bracket for Series EE 300 Desktop Intercom Stations; colour: black



EW 401G

Wall-Mount Bracket for Series EE 300 Desktop Intercom Stations; colour: light grey



EW 102

Wall-Mount Bracket for Series EE 300 Desktop Intercom Stations; colour: Transparent

COUNTER INTERCOM SYSTEMS

Helps to acoustically overcome protective barriers between people



Wherever glass, wood or brickwork put up sound barriers between people, modern communication solutions are needed to make their voices heard without compromising their safety and protection. Commend Counter Intercom systems provide a natural voice communication experience in acoustically isolated environments such as customer or patient windows, concierges' work areas, points of sale, security and clean room airlocks, as well as intensive care units and isolation wards in hospitals.

KEY FEATURES:

- Serverless Counter Intercom Stations
- Function keys with easily recognisable pictograms for intuitive operation
- OpenDuplex® for natural hands-free communication with high volume capacity
- Crystal clear sound, up to 15 kHz speech quality
- Connection port for additional amplifier
- Standalone solution, optimised for quick and easy installation



W × H × D (mm)

GEC	66 × 55 × 230
Gooseneck microphone	L 400 mm

COUNTER INTERCOM SYSTEMS - SERIES GEC 880



GEC 881

Counter Intercom Station with LC display and function keypad; black



GEC 882

Counter Intercom Station with gooseneck microphone, LC display and function keypad; black



COUNTER INTERCOM SYSTEMS - SERIES GEC 480



GEC 480S

Counter Intercom station with gooseneck microphone, Microphone Q400 and plug-in power adapter; black



GEC 481S

Counter Intercom station with gooseneck microphone and plug-in power adapter; black



GEC 481S U

Counter Intercom Station with gooseneck microphone, without power supply adapter; black



ACCESSORIES - SERIES GEC 880 | 480



AL 10-16S

12 Watt Column Speaker for Counter Intercom Systems, in weatherproof polyamide casing; black



PA30W15V

30 Watt desktop power adapter, input: 100-240 VAC with IEC-60320-C14 connector, output: 15 VDC with barrel connector; cable length: required 1.5Vm IEC cable (KAB-C13) not included

ACCESSORIES - SERIES GEC 880 | 480

For further accessories, e.g. external microphones, see Accessories (see page 125)

INDUSTRIAL INTERCOM STATIONS FOR ROUGH ENVIRONMENTS

Developed to withstand the harshest environments



These Intercom stations were developed specifically to provide resistance against extreme temperatures and high levels of humidity and dirt while still enabling clear communication and high speech intelligibility, even in extremely noisy environments. Application environments range from industrial sectors (e.g., metal, mining, oil and gas) to chemical plants and energy providers. Public industries and utilities also profit from the special qualities provided by this device series.

KEY FEATURES:

- Intercom Stations suitable for extreme temperatures and ambient conditions
- Highly visible orange-coloured casing, made from durable, light-weight high-performance plastic
- Tactile keypad for easy operation, even when wearing protective gloves
- Flexible, cost-efficient installation, thanks to 2-wire digital technology
- Optional IP network integration
- Various power supply options
- OpenDuplex® for natural, hands-free communication
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- The internal loudspeaker provides an exceptionally high sound pressure level of up to 118 dB
- The integrated Class D Amplifier enables direct connection of an external loudspeaker
- Suitable for point-to-point and conference communication, and for use in PA solutions



W × H × D (mm)

EE 7000 S	175 × 315 × 127
EE 7000 H	251 × 315 × 143
EE 7000 S H	251 × 315 × 143
EE 8000	175 × 312 × 145

INDUSTRIAL INTERCOM STATIONS - SERIES EE 7504D S



EE 7504D AC S

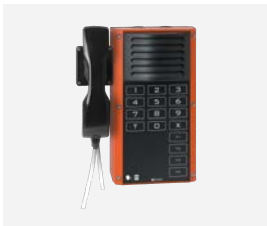
Industrial Intercom Station with full keypad, 4 function buttons, loudspeaker and AC power supply

EE 7504D DC S

Industrial Intercom Station with full keypad, 4 function buttons, loudspeaker and DC power supply



INDUSTRIAL INTERCOM STATIONS - SERIES EE 7504D S H



EE 7504D AC S H

Industrial Intercom Station with full keypad, 4 function buttons, loudspeaker, handset and AC power supply

EE 7504D DC S H

Industrial Intercom Station with full keypad, 4 function buttons, loudspeaker, handset and DC power supply



INDUSTRIAL INTERCOM STATIONS - SERIES EE 7504D H



EE 7504D AC H

Industrial Intercom Station with full keypad, 4 function buttons, handset and AC power supply

EE 7504D DC H

Industrial Intercom Station with full keypad, 4 function buttons, handset and DC power supply



INDUSTRIAL INTERCOM STATIONS - SERIES EE 7008D S



EE 7008D AC S

Industrial Intercom Station with 8 function buttons, loudspeaker and AC power supply

EE 7008D DC S

Industrial Intercom Station with 8 function buttons, loudspeaker and DC power supply



INDUSTRIAL INTERCOM STATIONS – SERIES EE 7008D S H



EE 7008D AC S H

Industrial Intercom Station with 8 function keys, loudspeaker, handset and AC power supply

EE 7008D DC S H

Industrial Intercom Station with 8 function buttons, loudspeaker, handset and DC power supply



INDUSTRIAL INTERCOM STATIONS – SERIES EE 7008D H



EE 7008D AC H

Industrial Intercom Station with 8 function buttons, handset and AC power supply

EE 7008D DC H

Industrial Intercom Station with 8 function buttons, handset and DC power supply



INDUSTRIAL INTERCOM STATIONS – SERIES EE 7P04D S



EE 7P04D AC S

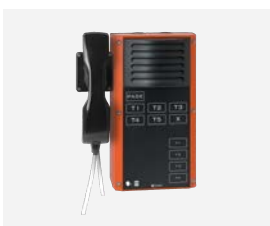
Industrial Intercom Station with party-line keypad, 4 function buttons, loudspeaker and AC power supply

EE 7P04D DC S

Industrial Intercom Station with party-line keypad, 4 function buttons, loudspeaker and DC power supply



INDUSTRIAL INTERCOM STATIONS – SERIES EE 7P04D S H



EE 7P04D AC S H

Industrial Intercom Station with party-line keypad, 4 function buttons, loudspeaker, handset and AC power supply

EE 7P04D DC S H

Industrial Intercom Station with party-line keypad, 4 function buttons, loudspeaker, handset and DC power supply



INDUSTRIAL INTERCOM STATIONS - SERIES EE 7P04D H



EE 7P04D AC H

Industrial Intercom Station with party-line keypad, 4 function buttons, handset and AC power supply

EE 7P04D DC H

Industrial Intercom Station with party-line keypad, 4 function buttons, handset and DC power supply



UPGRADE LICENCES - SERIES EE 7000D | EX 7000D



L-EX-AF-OUT

Licence for activating a secondary amplifier and voltage controlled relay

INDUSTRIAL STATIONS - SERIES EE 8000



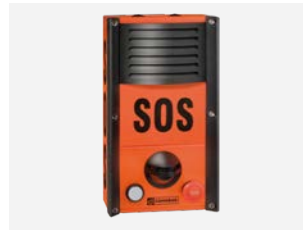
EE 8158M

Industrial Intercom Station with eight LED direct dialling buttons, including loud-speaker and microphone



EE 8108M

Industrial Intercom Station with two LED direct dialling buttons, including loud-speaker and microphone



EE 81ADMSOS

Industrial Intercom Station with 'SOS' label, one LED-direct dialling button, one SOS mushroom button, loud-speaker and microphone



EE 8999M

Basic housing for three Series EE 8000 Industrial Intercom Station modules, including electronic control unit



EE 8999MSOS

Basic housing with 'SOS' label for three Series EE 8000 Industrial Intercom Station modules, including electronic control unit



EE 8999S

Extension housing for three Series EE 8000 Industrial Intercom Station modules, including electronic control unit



MODULES FOR SERIES EE 8000 INDUSTRIAL STATIONS



EM 600

Dummy module for Series EE 8000 Industrial Intercom Stations



EM 6A0

Dummy Module for Series EE 8000 Industrial Intercom Stations with "SOS" labelling



EM 650

Loudspeaker module for Series EE 8000 Industrial Intercom Stations



EM 6CA

Camera Module for Series EE 8000 Industrial Intercom Stations



EM 602

Keypad Module for Series EE 8000 Industrial Intercom Stations with keys '1' to '6' as part of a full keypad



EM 603

Keypad Module for Series EE 8000 Industrial Intercom Stations with keys '7' to 'X' as part of a full keypad



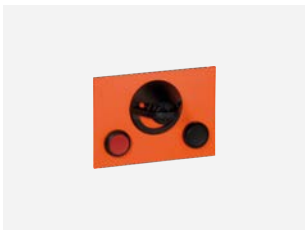
EM 606

Dummy Module for Series EE 8000 Industrial Intercom Stations with six direct dialling buttons



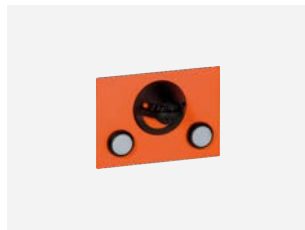
EM 605

Keypad Module for Series EE 8000 Industrial Intercom Stations with six LED direct dialling buttons and label areas



EM 660

Microphone Module for Series EE 8000 Industrial Intercom Stations with two direct dialling buttons



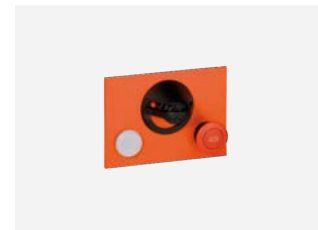
EM 680

Microphone Module for Series EE 8000 Industrial Intercom Stations with two LED direct dialling buttons



EM 681

Microphone Module for Series EE 8000 Industrial Intercom Stations, with one LED direct dialling button and one SOS mushroom button



EM 6B0

Microphone Module for Series EE 8000 Industrial Intercom Stations with white call indicator light and SOS mushroom button

INDUSTRIAL INTERCOM STATIONS FOR EX-ENVIRONMENTS



Series EX 7000D Intercom Stations are built with a special focus on easy operability and futureproof scalability to meet the specific communication needs in areas with explosive atmosphere. The Intercom Stations are fully certified to ensure full operational reliability in areas that are exposed to gas emissions or dust. The Intercom stations function as hubs, with connection options for external loudspeakers and a signal light; when upgraded with additional signal input/output ports, they enable monitoring and control of external equipment.

KEY FEATURES:

- ATEX-, IECEx- and others Country-specific certificates
- Suitable for Ex zones 1 and 21, as well as 2 and 22
- Highest explosion hazard group (IIC/IIIC)
- Highest temperature class (T6/T80°C)
- Highly visible orange-coloured casing, made from durable, light-weight high-performance plastic
- Tactile keypad for easy operation, even when wearing protective gloves
- Flexible, cost-efficient installation, thanks to 2-wire digital technology
- Optional IP network integration
- Various power supply options
- OpenDuplex® and IVC for natural, hands-free communication, with high volume
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- The internal loudspeaker provides an exceptionally high sound pressure level of up to 118 dB
- The integrated Class D Amplifier enables direct connection of an external loudspeaker
- Suitable for point-to-point and conference communication, and for use in PA solutions



W × H × D (mm)

EX 7000 S	175 × 344 × 127
EX 7000 H	251 × 344 × 143
EX 7000 S H	251 × 344 × 143

INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7504D S



EX 7504D 1 AC S

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, loudspeaker and AC power supply

EX 7504D 2 AC S

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, loudspeaker and AC power supply

EX 7504D 1 DC S

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, loudspeaker and DC power supply

EX 7504D 2 DC S

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, loudspeaker and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7504D S H



EX 7504D 1 AC S H

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, loudspeaker, handset and AC power supply

EX 7504D 2 AC S H

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, loudspeaker, handset and AC power supply

EX 7504D 1 DC S H

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, loudspeaker, handset and DC power supply

EX 7504D 2 DC S H

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, loudspeaker, handset and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7504D H



EX 7504D 1 AC H

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, handset and AC power supply

EX 7504D 2 AC H

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, handset and AC power supply

EX 7504D 1 DC H

Intercom Station for Ex Zones 1 and 21, with full keypad, 4 function buttons, handset and DC power supply

EX 7504D 2 DC H

Intercom Station for Ex Zones 2 and 22, with full keypad, 4 function buttons, handset and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS - SERIES EX 7008D S



EX 7008D 1 AC S

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, loudspeaker and AC power supply

EX 7008D 2 AC S

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, loudspeaker and AC power supply

EX 7008D 1 DC S

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, loudspeaker and DC power supply

EX 7008D 2 DC S

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, loudspeaker and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS - SERIES EX 7008D S H



EX 7008D 1 AC S H

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, loudspeaker, handset and AC power supply

EX 7008D 2 AC S H

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, loudspeaker, handset and AC power supply

EX 7008D 1 DC S H

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, loudspeaker, handset and DC power supply

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, loudspeaker, handset and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS - SERIES EX 7008D H



EX 7008D 1 AC H

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, handset and AC power supply

EX 7008D 2 AC H

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, handset and AC power supply

EX 7008D 1 DC H

Intercom Station for Ex Zones 1 and 21, with 8 function buttons, handset and DC power supply

EX 7008D 2 DC H

Intercom Station for Ex Zones 2 and 22, with 8 function buttons, handset and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7P04D S



EX 7P04D 1 AC S

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, loud-speaker and AC power supply

EX 7P04D 1 DC S

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, loud-speaker and DC power supply

EX 7P04D 2 AC S

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, loud-speaker and AC power supply

EX 7P04D 2 DC S

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, loud-speaker and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7P04D S H



EX 7P04D 1 AC S H

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, loud-speaker, handset and AC power supply

EX 7P04D 1 DC S H

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, loud-speaker, handset and DC power supply

EX 7P04D 2 AC S H

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, loud-speaker, handset and AC power supply

EX 7P04D 2 DC S H

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, loud-speaker, handset and DC power supply



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7P04D H



EX 7P04D 1 AC H

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, handset and AC power supply

EX 7P04D 1 DC H

Intercom Station for Ex Zones 1 and 21, with party-line keypad, 4 function buttons, handset and DC power supply

EX 7P04D 2 AC H

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, handset and AC power supply

EX 7P04D 2 DC H

Intercom Station for Ex Zones 2 and 22, with party-line keypad, 4 function buttons, handset and DC power supply



UPGRADE LICENCES – SERIES EE 7000D | EX 7000D



L-EX-AF-OUT

Licence for activating a secondary amplifier and voltage controlled relay

DETENTION CELL TERMINALS

☞ Active protection
for detention staff



The Cell Intercom terminal has been designed with the special requirements of custodial institutions, forensics laboratories, and detention cells at police stations and courts. In addition to voice communication, the terminals also provide security enhancing alarm, control and messaging functions. Innovative technologies in combination with a modular concept make for a futureproof investment. The optional Detection Module for mobile phones helps to keep the problem of illicit mobile phone use among detained persons under control. The surface touch sensor helps to protect custodial staff while they are inside a detention cell. In critical situations, simply touching the surface of the front panel is all it takes to trigger the warden's alarm.

Key features:

- Vandalism-resistant Intercom Stations for detention cells
- Poke protection, special screws and sabotage detection contact
- Piezo electric button with built-in LEDs ("Find Light")
- OpenDuplex® for natural hands-free communication with high volume capacity
- Crystal clear sound with up to 7 kHz HD Voice speech quality
- Radio and music feeds for inmates
- Emergency call support for wardens based on timing, audio monitoring and surface touch sensor
- Modular system makes for a futureproof investment



W × H × D (mm)

EF 031	179 × 279 × 3
EB 330	147 × 162 × 25
EB 330AH	150 × 162 × 69.5
EB 330A	160 × 296 × 90



EB 330

Cell electronics add-on kit for integrated installation and connection of an EF 031 front panel



EB 330S

Cell Electronics Add-on Kit with surface touch sensor for integrated installation and connection of an EF 031 front panel



EB 330AH

Cell Electronics add-on kit for physically offset installation and connection of an EF 031 front panel - the kit is for installation on a mounting plate with top-hat rail bracket.



EB 330AHS

Cell Electronics add-on kit with surface touch sensor for physically offset installation and connection of an EF 031 front panel - the kit is for installation on a mounting plate with top-hat rail bracket.



EB 330A

Cell Electronics Add-on Kit for physically offset installation and connection of an EF 031 front panel - the kit is for installation in a surface mount box.



CELL TERMINAL FRONT PANELS - SERIES EF 031



EF 031-1

Cell terminal front plate with piezo electric button for call/emergency call, microphone and loudspeaker



EF 031-2

Cell Terminal front panel with 2 piezo electric buttons for calls/emergency calls, including light, microphone and loudspeaker



EF 031-2R

Cell Terminal front panel with scanning point, 2 piezo electric buttons for calls/emergency calls, including light, microphone and loudspeaker



EF 031-2MR

Cell Terminal front panel with scanning point, 2 piezo electric buttons for calls/emergency calls, including light, microphone, loudspeaker, 3 keys for music feed control and 6 status LEDs



DETENTION CELL TERMINALS - ACCESSORIES



UP 030

Flush Mount Box for fitting front panels EF 031 and Cell Electronics EB 330

CONTROL DESK SYSTEMS

Perfect overview
with total control



Commend Control Desk systems provide a full overview of the entire system, enabling staff to take quick action in emergency situations. Even complex Intercom networks or video and control functions can be put at the user's fingertips via ergonomic user interfaces.

This opens up a world of possibilities for visitor management with excellent video-enhanced communication, even in areas with limited space. It's a powerful solution that provides a perfect blend of intelligent functionality and superior flexibility.

KEY FEATURES:

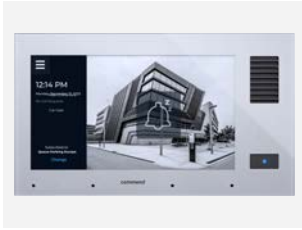
- Modular Control Desk solutions for any application size, from 'compact' to 'enterprise'
- Various display versions with optimised user guidance; LC or Touch display
- OpenDuplex® for natural, hands-free communication
- Crystal clear sound with up to 20 kHz uHD Voice speech quality
- Multi-functional LED for visual user guidance
- Expansion modules, e.g. gooseneck microphone, handset or Direct Dialling Button Module for even more functions



W × H × D (mm)

id8	245 × 142 × 35
EE 980	270 × 138 × 37
CD 800	262 × 196 × 45
EE 380	179 × 57 × 230

CONCERTO CONTROL DESK SYSTEM – SERIES ID8



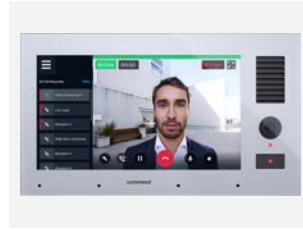
ID8 TD

Control Desk Terminal with 8-inch touch display and one call button



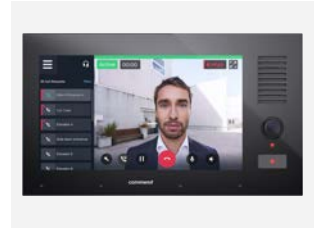
ID8 TD-B

Control Desk Terminal with 8-inch touch display and one call button – black



ID8 TD CM

Control Desk Terminal with 8-inch touch display, camera and one call button



ID8 TD CM-B

Control Desk Terminal with 8-inch touch display, camera and one call button – black



EXPANSION MODULES – SERIES ID8



ID8 DKDDM

Direct Dialling Module with 14 buttons and labelling area, for connection to an id8 Control Desk Terminal via USB



ID8 DKDDS

Direct Dialling Module with 14 buttons and labelling area, for connection to an id8 Direct Dialling Module via connection board



ID8 DKDDM-B

Direct Dialling Module with 14 buttons and labelling area, for connection to an id8 Control Desk Terminal via USB – black



ID8 DKDDS-B

Direct Dialling Module with 14 buttons and labelling area, for connection to an id8 Direct Dialling Module via connection board – black



ID8 DKHS

Desktop extension module with handset for id8 series Control Desk Terminals



ID8 GM

Cardioid gooseneck microphone for connection to an id8 Control Desk Terminal



ID5 WMHS

Handset module for wall mounting, with USB connection

ACCESSORIES - SERIES ID8



AFIL USB

Audio induction loop extension kit for transmission of audio signals to hearing aids; suitable for Intercom stations with USB port



EB3E2A-AUD

I/O Extension Module with audio interface port for Intercom Stations with USB port, optimised for Series WS and Concerto mounting kits



IP-CON

IP Security Switchbox for secure connection between an Intercom station, network and Door Opener



IP-BRIDGE

IP converter box with metal housing for extending the Ethernet network via 2-wire connections



EB8E8A

I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail



EB1E1A

USB I/O Extension Module for Intercom Stations with USB port



ID8 SH

Mounting Kit made from powder coated sheet steel, for surface mounting of Series id8 Control Desk Terminals



ID8 FB

High-grade steel Mounting Kit for cavity wall mounting and flush mounting of Series id8 Control Desk Terminals



ID8 DK

Desktop Kit for Series id8 Control Desk Terminals



ASKKAT5-3S

Network cable, Cat. 5, shielded; length: 3.0 m

DUETTO CONTROL DESK SYSTEM – SERIES EE 980



EE 980 CM

Control Desk Terminal with 7-inch touch display and camera



EE 980

Control Desk Terminal with 7-inch touch display



SIP-EE 980 CM

Control Desk Terminal with 7-inch touch display and camera



SIP-EE 980

Control Desk Terminal with 7-inch touch display



ACCESSORIES – SERIES EE 980



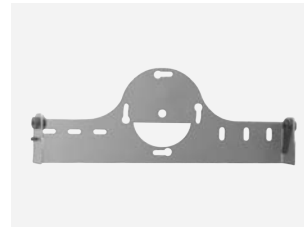
EE HS9

Handset for Compact Control Desk EE 980, for connection via JST connector



EE DK9

Desktop Kit with adjustable tilt angle for Control Desk System EE 980; colour: black



EE SH9

Wall mount bracket for Control Desk System EE 980, colour: Silver



PA15WPOE

15 Watt PoE Injector, input: 100–240 VAC, with exchangeable plugs (AU/EU/UK/US)



ASKKAT5-3S

Network cable, Cat. 5, shielded; length: 3.0 m

CONDUCTOR CONTROL DESK SYSTEM - SERIES CD 800

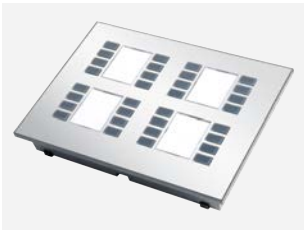


CD 800P I

Control Desk Basic Terminal with LC display, full keypad, function keys and eight direct dialling buttons



EXPANSION MODULES - SERIES CD 800



CDDD 32P

Direct Dialling Button module with 32 buttons and label areas



CDMI 50P HD

Expansion module with gooseneck microphone and headset port



CDHD 50P

Expansion module with headset port



CDHS 50P

Expansion module with hand-set and "Push to talk" button

ACCESSORIES - SERIES CD 800



CDDK

Desktop Kit with adjustable tilt angle for Control Desk System CD 800; colour: black



PA30W24V-EU

30 Watt plug-in power supply unit, input: 100-240 VAC with solid EU plug, output: 24 VDC with open cable tails; cable length: 1.5 m



PA30W24V-CA

30 Watt plug-in power supply unit, input: 100-240 VAC with exchangeable connectors (AU/UK/US), exit: 24 VDC with open cable tails; cable length: 1.5 m

CONTROL DESK SYSTEM - SERIES EE 380



EE 380AAS

Control Desk Intercom station with LC display, full keypad and function keys; black



EE 380ABEGS

Control Desk Intercom Station with add-on loudspeaker, gooseneck microphone, LC display, full keypad and function keys; black



EE 380ACS

Control Desk Intercom station with LC display, full keypad and function keys; black



EE 380ADEGS

Control Desk Intercom station with add-on loudspeaker, LC display, full keypad and function keys; black



EXPANSION MODULES - SERIES EE 380



EM 302S

Expansion Module with 12 direct dialling buttons for Series EE 380 Intercom Stations



EM 302EG

Expansion module with 12 direct dialling buttons for Series EE 380 Intercom stations with add-on loudspeaker



EE HS3

Handset Module with "Push to Talk" button for Control Desk System EE 380

ACCESSORIES - SERIES EE 380



PA24W30V-EU

24 Watt plug-in power supply unit, input: 100-240 VAC with solid EU plug, output: 30 VDC with angled barrel connector; cable length: 2.0 m



PA24W30V-CA

24 Watt plug-in power supply unit, input: 100-240 VAC with exchangeable plugs (AU/UK/US), output: 30 VDC with angled barrel connector; cable length: 2.0 m



PA24W15V-CA

24 Watt plug-in power supply unit, input: 100-240 VAC with exchangeable plugs (AU/EU/UK/US), output: 15 VDC with angled barrel connector; cable length: 2.0 m

CONTROL DESK MANAGEMENT - STUDIO BY COMMEND



Studio is a powerful family of software modules for professional Control Desk management. Everyday challenges like handling time-critical complex situations impose a specific demand on Intercom systems with visualisation capabilities: the need to support natural communication in HD Audio quality.

BASIC FUNCTIONS:

- Attracting the user's attention to system events with automatically activated icons on switchable plans, in combination with flashing effects, sounds and the display of overviews in status windows.
- Various visualisation and alarm options
- Automated e-mail notifications in case of system events
- Multi-monitor support for improved overview, including individual custom layouts, free positioning of plan overviews, status windows, response measures, etc.
- Subscriber directory for direct calls; can be imported via facility configuration settings or from external Excel or CSV files
- State-of-the-art client-server architecture
- Flexible, scalable licensing model to suit individual needs

USER PERMISSIONS:

- User categorisation into individual roles, users and user groups
- Access to plan sets, permissions and groups based on user rights
- User language can be set for each user individually

PLANSET:

- Individual permission settings for controlling the visibility of plans and icons
- Access to specific plan sets depending on user rights
- Plans are divided into plan hierarchies (countries, cities, car parks, etc.). Plan hierarchy levels may be assigned multiple plans (e.g., multiple car park levels assigned to a car park)
- Access to special plans can be defined to include specific plans with all or only specific sub-plans

VIDEO INTEGRATION:

- Main monitor, preview monitors, and surveillance monitors (video scanning function)
- Automatic streaming of incoming calls to preview monitor
- Automatic streaming of active calls to main monitor
- Integration support for many common Video-over-IP solutions (e.g. Axis, Bosch, Mobotix, ...)

STUDIO MODULES



E-WIN-BASE-SPD

Licence for 1 ComWIN Visualisation Client and 100 data points



E-WIN-CPF

Licence for 1 ComWIN Visualisation Client



E-WIN-DP5-SPD

Licence for 500 ComWIN data points



E-VID-CPF

Licence for 1 ComVIDEO Client for integrating Video-over-IP sources into the Studio environment



E-RPT-CPF

Licence for 1 ComREPORT Client for logging all events and messages to an SQL database



E-DATA-SPD

Licence for 1 ComDATA Client for advanced business intelligence reporting and data analysis



E-REC-CPF

Licence for 1 ComREC Client for audio stream recording



L-IP-REC1

Licence for 1 IP/RPT recording channel for call recording



E-SCH-CPF

Licence for 1 ComSCHEDULE Client for time scheduled control of processes and events

UPGRADE SUBSCRIPTIONS - STUDIO



E-ST-USUB1

Studio Upgrade Subscription for 1 year

E-ST-USUB3

Studio Upgrade Subscription for 3 years

E-ST-USUB5

Studio Upgrade Subscription for 5 years

STUDIO BACKUP SERVER



E-ST-BK-SPD

Licence for 1 Studio Backup Server for redundant systems

E-WIN-BKD5-SPD

Licence for 1 Studio Backup Server Extension for 500 additional data points in ComWIN

STUDIO INTERFACES - BUILDING MANAGEMENT SYSTEMS



E-WIN-OPC-SPD

Licence for integration of OPC into the Studio environment

STUDIO INTERFACES - VIDEO MANAGEMENT SYSTEMS



E-VID-MST-SPD

Licence for integration of Milestone XProtect into the Studio environment



E-VID-NUUO-SPD

Licence for integration of NUUO into the Studio environment



E-VID-SAMS-SPD

Licence for integration of Wisenet Samsung into the Studio environment



E-VID-QOG-SPD

Licence for integration of Qognify into the Studio environment



E-VID-VDG-SPD

Licence for integration of VDG Sense into the Studio environment



STUDIO INTERFACES - PARKING MANAGEMENT SYSTEMS



E-WIN-DES-SPD

Licence for integration of Designa systems into the Studio environment



E-WIN-SBA-SPD

Licence for integration of S&B systems into the Studio environment



E-WIN-SKI-SPD

Licence for integration of SKI-DATA systems into the Studio environment



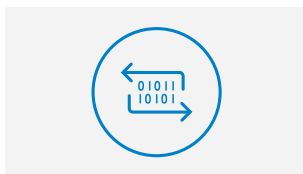
STUDIO INTERFACES - FIRE ALARM SYSTEMS



E-WIN-SHP-SPD

Licence for integration of Hekatron fire alarm systems into the Studio environment

STUDIO INTERFACES - NETWORK AND DATA SYSTEMS



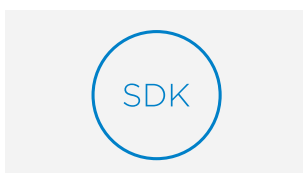
E-WIN-SNMP-SPD

Licence for integration of SNMP into the Studio environment

E-WIN-FIL-SPD

Licence for integration of file monitoring into the Studio environment

STUDIO INTERFACES - SDK



E-SDK-SPF

Licence for 1 ComSDK Server connection (Software Development Kit)

INTERCOM MODULES

“ If you can imagine it,
just build it...”



Intercom modules by Commend: always the right choice for individual solutions and the best result. These modules integrate smoothly into custom casings and panels – perfect for custom building Intercom Stations to suit individual customer requirements. They are also ideal for fitting space-saving Intercom Stations into various kinds of terminals (ticket vending machines, information terminals, cashpoints, etc.). This way, operators can offer their customers extra services with added value.

KEY FEATURES:

- Wide range of connection options for monitoring inputs and controlling outputs or LEDs
- Extensively customisable in terms of appearance and functionality
- Full range of Commend Intercom functionality
- Optionally available with support for a touch display (HDMI) or camera (HS-Link)
- OpenDuplex® for natural hands-free communication with high volume capacity
- Crystal clear sound with up to 20 kHz uHD Voice speech quality
- Easy-to-install add-on options via USB port

TYPICAL APPLICATIONS:

- Special Intercom Stations
- Integration of Intercom terminals into panels and enclosures
- Call and emergency communication functions, e.g. for Alarm Point SOS stations
- Suitable for installation in elevator cars

MULTI-SENSORY IP INTERCOM MODULES



IM6

IP intercom module with polycarbonate housing, built-in 15 W class-D amplifier, RJ45 port, support for a touch display via HDMI port and camera connection through HS-Link port



IM3

Ultra-compact multi-sensory IP intercom module with metal housing, intelligent 6 W Amplifier, RJ45 port and camera connection through HS-Link port

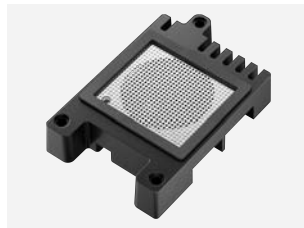


EXTENSION MODULES - SERIES IM3 | IM6



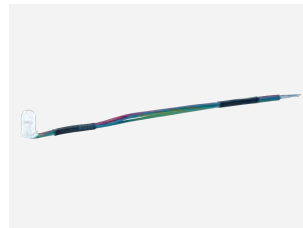
CM1

HD camera with HS-Link port, optimised for Module Series im3 and im6



LSM

Loudspeaker, optimised for module series im3 and im6



LED3

3-colour LED, optimised for module series im3 and im6



AFIL USB

Audio induction loop extension kit for transmission of audio signals to hearing aids; suitable for Intercom stations with USB port



IP-CON

IP Security Switchbox for secure connection between an Intercom station, network and Door Opener



PA25WPOE-DC

25 Watt PoE Injector, input: 24-48 VAC, optimised for Series WS & Concerto Mounting Kits



EB3E2A-AUD

I/O Extension Module with audio interface port for Intercom Stations with USB port, optimised for Series WS and Concerto mounting kits



POE-SPLIT

PoE-Split Power Adapter, input: PoE (15,4/30/60 W), output: PoE+ (30 W) and 12VVDC (19 W)



POE-SPLIT-M

Mounting kit for one PoE-Split Power Adapter POE-SPLIT



IP-BRIDGE

IP converter box with metal housing for extending the Ethernet network via 2-wire connections



EB1E1A

USB I/O Extension Module for Intercom Stations with USB port



EB8E8A

I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail



DINRAIL150

Top-Hat DIN Rail kit for mounting of modules designed for top hat rail mounting; length: 150 mm



ET 908H

IP Intercom Module with integrated switch and connection ports for buttons and audio components; horizontal RJ45 ports



ET 908H-1

IP Intercom Module with integrated switch and connection ports for buttons and audio components; vertical RJ45 ports



ET 908HMI

IP Intercom Module with integrated switch, microphone MIC 480 and connection ports for buttons and audio components; horizontal RJ45 ports



ET 908HMI-1

IP Intercom Module with integrated switch, microphone MIC 480 and connection ports for buttons and audio components; vertical RJ45 ports



ET 962H

IP-Intercom module with polycarbonate housing, built-in microphone, loudspeaker and connection ports for up to three call buttons



ET 962HR

IP Intercom module, compliant with EN-50155 (for installation in rolling stock), with polycarbonate housing, built-in microphone, loudspeaker and connection ports for up to three call buttons



ET 970H

IP Intercom Module with polycarbonate housing, microphone MIC 480 and connection for an external loudspeaker and up to three call buttons



ET 970HR

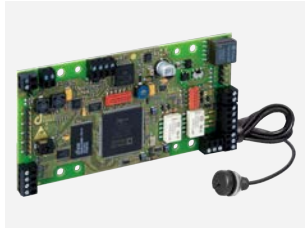
IP Intercom module, compliant with EN-50155 (for installation in rolling stock), with polycarbonate housing, microphone MIC 480 and connection ports for an external loudspeaker and up to three call buttons

INTERCOM MODULES



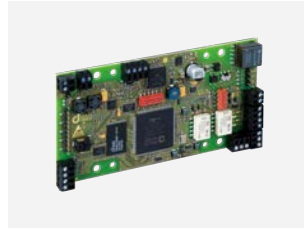
ET 811A

Intercom Module with built-in microphone, loudspeaker, keypad, LC display and connection ports for a headset, earphones and a gooseneck microphone



ET 808A

Intercom Module with microphone MIC 480 and connections for an add-on loudspeaker, status light and keypad, or up to 18 call buttons



ET 808AME

Intercom Module with connection ports for microphone, loudspeaker, status light and one keypad, or up to 18 call buttons



ET 862A

Intercom Module with polycarbonate housing, built-in microphone, loudspeaker and connection ports for a keypad, or up to 12 call buttons



ET 870A

Intercom module with polycarbonate housing, microphone MIC 480 and connection for an external loudspeaker and 2 buttons



ET 871A

Intercom Module with polycarbonate housing, microphone MIC 480, integrated loudspeaker and connection for 2 buttons



I/O MODULES



IP-CON

IP Security Switchbox for secure connection between an Intercom station, network and Door Opener



EB3E2A-AUD

I/O Extension Module with audio interface port for Intercom Stations with USB port, optimised for Series WS and Concerto mounting kits



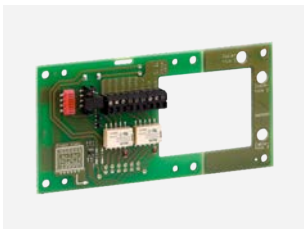
ET 8E8A-IP

Remote I/O Module for installation on top-hat rail



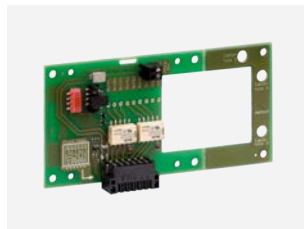
ET 8E8A

Remote I/O Module for installation on top-hat rail



EB2E2AHE

I/O Extension Module for Intercom Modules with EB port and for IP Converter, as add-in board ET 901HE



EB2E2A

I/O Extension Module for Intercom Modules with EB port and for IP Converter Box ET 901



EB8E4A

I/O Extension Module for Intercom Modules with EB port



EB1E1A

USB I/O Extension Module for Intercom Stations with USB port



EB8E8A

I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail



DINRAIL150

Top-Hat DIN Rail kit for mounting of modules designed for top hat rail mounting; length: 150 mm

AUDIO INDUCTION LOOP AMPLIFIER



AFIL

Audio induction loop amplifier with polycarbonate housing, for transmission of audio signals to hearing aids; without induction loop



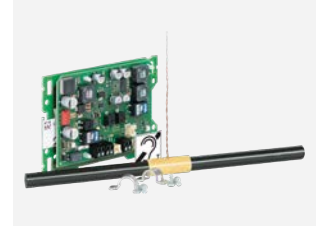
AFIL EB

Audio induction loop amplifier for transmission of audio signals to hearing aids; without induction loop



AFIL USB

Audio induction loop extension kit for transmission of audio signals to hearing aids; suitable for Intercom stations with USB port



WSEB IL

Audio Induction Loop Extension Kit for transmission of audio signals to hearing aids

DOOR STATION MODULES - SERIES ET 861A



ET 861AWE

Door Call Station Module with one call button, compatible with Vario 6 Series by Siedle; white

ET 861ASI

Door Call Station Module with one call button, compatible with Vario 6 Series by Siedle; silver

ET 861ADG

Door Call Station Module with one call button, compatible with Vario 6 Series by Siedle; dark grey/glimmer

ET 861AAG

Door Call Station Module with one call button, compatible with Vario 6 Series by Siedle; anthracite grey



NETWORK LOUDSPEAKERS



A wide range of innovative functions sets the Commend Network Loudspeakers apart from any classic Public Address solution. The integrated microphone supports new audio features such as IVC (Intelligent Volume Control), which automatically adjusts the volume setting to ambient noise levels, even when playing back pre-recorded messages. This ensures a high level of acoustic intelligibility, even at extreme, changeable background noise. Other benefits include duplex and call-back functions, as well as an “Audio Monitoring” feature, which provides ambient acoustic surveillance and automatic triggering of actions such as voice announcements or emergency calls. The loudspeakers come in various versions to flexibly cater for a wide range of environments, from rough outdoor areas to protected indoor locations.

KEY FEATURES:

- Speaker with integrated Intercom module; individually addressable and configurable
- Different designs for indoor, outdoor and industrial applications
- Integrated microphone for duplex and call-back functionalities
- OpenDuplex® and IVC ensure natural, hands-free communication at high volume levels
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Permanent line and function self-monitoring
- No need for central amplifiers
- Ideal for small-sized and remote PA installations



W × H × D (mm)

HG	180 × 120 × 235
PW	145 × 145 × 210
CW	167 × 167 × 112
SCW	265 × 165 × 88

IP LOUDSPEAKERS - SERIES AFLS



AFLS 10H HG

IP Horn Loudspeaker with built-in Intercom module - RAL 7035



AFLS 10H PW

IP Projector Loudspeaker with built-in Intercom module - RAL 9010



AFLS 10H CW

IP Ceiling Loudspeaker with built-in Intercom module - RAL 9010



AFLS 10H SC W

IP Cabinet Loudspeaker with built-in Intercom module - RAL 9010



NETWORK POWER AMPLIFIERS

Combines the approved
with the innovative



unified
PA

The Unified PA solution is an integral part of Commend's holistic system concept. This approach opens up a range of unique possibilities for operators and a new level of everyday operational efficiency for users.

A high performance level and a selection of different audio outputs are among the main characteristics of Series AF amplifiers. As a result, the devices are universally usable up to the level of complex PA and Intercom solutions. All models come in a compact casing and efficient, high-performance design, making them suitable for a wide range of applications. The amplifiers are optimised both for installation in 19-inch racks and for decentralised on-site installation. These flexible installation options help to reduce both cabling costs as well as the devices' power and energy consumption. Easy networking, combined with security functions like loudspeaker-to-line monitoring and audio self-monitoring make Public Address both secure and highly efficient.

KEY FEATURES:

- Easy integration, thanks to support of various protocols and interfaces
- 20 W to 500 W output power
- Durable casings
- 70 V/100 V audio output with Loudspeaker/Line Monitoring
- Class-D Amplifier, optimised for high efficiency and low thermal footprint
- Short-circuit and overrange protected
- Installation in a server rack or decentralised on-site placement
- Line self-monitoring between amplifier and Intercom Server



W × H × D (mm)

AF 500	401 × 44 × 251
AF 250	401 × 44 × 251
AF 125	401 × 44 × 251
AF 50	201 × 44 × 260
AF 20	159 × 49 × 87

POWER AMPLIFIERS – SERIES AF 500 | AF 250 | AF 125



AF 500

500 Watt IP Amplifier in metal housing, 1 HU



AF 250

250 Watt IP Amplifier in metal housing, 1 HU



AF 125

125 Watt IP Amplifier in metal housing, 1 HU



POWER AMPLIFIERS – SERIES AF 50



AF 50H

50 Watt Amplifier in polycarbonate housing, 1 HU half-rack



AF 50D

50 Watt Amplifier in polycarbonate housing, 1 HU half-rack



POWER AMPLIFIERS – SERIES AF 20



AF 20H

20 Watt Amplifier in polycarbonate housing



AF 20D

20 Watt Amplifier in polycarbonate housing



POWER AMPLIFIERS - LICENCES



L-AF-LM

Licence for loudspeaker line monitoring for Series AF 50, AF 125, AF 250 and AF 500 Power Amplifiers

ACCESSORIES



PA60W24V

60 Watt Desktop Power Supply, input: 100-240 VAC with IEC-60320-C14 connection, output: 24 VDC with open cable tails - cable length: 1.5Vm (IEC cable KAB-C13 not included)



ET 901-HSH35

Mounting bracket for fastening to a top-hat rail in a switch box



PF-RM-1HE

19" rack mounting kit for one or two Virtuosis Link and AF 50 Amplifiers side by side or for rack mounting of one AF 125, AF 250 and AF 500 Amplifier - Height: 1U



PF-WM

Wall and desktop mounting kit for Virtuosis Link or AF 50, AF 125, AF 250 and AF 500 Amplifier

IEC CABLE C13



KAB-C13-AU

IEC cable C13, version for Australia; length: 1.5 m

KAB-C13-EU

IEC cable C13, version for Europe; length: 1.5 m

KAB-C13-UK

IEC cable C13, version for UK; length: 1.5 m

KAB-C13-US

IEC cable C13, version for USA; length: 1.5 m

LOUDSPEAKERS

Information that comes through loud and clear



Commend offers a series of select 70 V/100 V loudspeakers for PA solutions. The design of these high-quality loudspeakers matches that of the AFLS series, a perfect addition to the Unified PA portfolio. This series makes Commend the first provider worldwide to offer loudspeakers that are fully certified as per IEC 62368-1 to fully comply with the latest security standards.

KEY FEATURES:

- Different designs for indoor, outdoor and industrial applications
- Combinable with Series AF amplifiers



W × H × D (mm)

HG	180 × 120 × 230
PW	145 × 145 × 210
CIBW	167 × 167 × 95
CEBW	167 × 167 × 62
RCW	144 × 144 × 87
SCW	265 × 165 × 88
CCW	330 × 240 × 83

HORN LOUDSPEAKERS - SERIES CLS 10 HG



CLS 10 HG

10 Watt Horn Loudspeaker,
100 V - RAL 7035

CLS 10 HG70V

10 Watt Horn Loudspeaker, 70
V - RAL 7035

IP66 IK10 119^{dB}

HORN LOUDSPEAKERS - SERIES CLS 15 HG



CLS 15 HG

15 Watt Horn Loudspeaker,
100VV - RALV7035

CLS 15 HG8

15 Watt Horn Loudspeaker,
8V[- RALV7035

IP66 IK10 120^{dB}

HORN LOUDSPEAKERS - SERIES CLS 20 HG



CLS 20 HG

20 Watt Horn Loudspeaker,
100VV - RALV7035

CLS 20 HG70V

20 Watt Horn Loudspeaker,
70VV - RALV7035

CLS 20HG8

20 Watt Horn Loudspeaker,
8V[- RALV7035

IP66 IK10 121^{dB}

HORN LOUDSPEAKERS - SERIES CLS HG



CLS 30 HG

30 Watt Horn Loudspeaker,
100 V - RAL 7035

CLS 30 HG70V

30 Watt Horn Loudspeaker,
70 V - RAL 7035

IP66 IK10 119^{dB}

PROJECTOR LOUDSPEAKERS - SERIES CLS PW



CLS 6 PW

6 Watt Projector Loudspeaker, 100 V - RAL 9010

CLS 6 PW70V

6 Watt Projector Loudspeaker, 70 V - RAL 9010



CEILING-MOUNTED LOUDSPEAKERS - SERIES CLS CIBW



CLS 6 CIBW

6 Watt Ceiling-Mounted Loudspeaker with rear cover, 100 V - RAL 9010

CLS 6 CIBW70V

6 Watt Ceiling-Mounted Loudspeaker with rear cover, 70 V - RAL 9010



CEILING-MOUNTED LOUDSPEAKERS - SERIES CLS CEBW



CLS 6 CEBW

6 Watt Ceiling-Mounted Loudspeaker, 100 V - RAL 9010

CLS 6 CEBW70V

6 Watt Ceiling-Mounted Loudspeaker with rear cover, 70 V - RAL 9010



SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS HG



CLS 6 RCW

6 Watt Surface-Mounted Loudspeaker, 100VV - RALV9010

CLS 6 RCW70V

6 Watt Surface-Mounted Loudspeaker, 70VV - RALV9010



SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS SCW



CLS 6 SCW

6 Watt Surface-Mounted Loudspeaker, 100VV - RALV9010

CLS 6 SCW70V

6 Watt Surface-Mounted Loudspeaker, 70VV - RALV9010

101^{dB}

SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS CCW



CLS 6 CCW

6 Watt Surface-Mounted Loudspeaker, 100VV - RALV9010

CLS 6 CCW70V

6 Watt Surface-Mounted Loudspeaker, 70VV - RALV9010

101^{dB}

MARITIME INTERCOM STATIONS



Designed in the Alps
made for the Sea



Ognios by Commend offers an IP-based communication solution that has been specially developed and designed for the maritime market. The modularity of the system allows for great flexibility; the Ognios modules can be easily combined with each other according to individual requirements. Intercom Stations and modules with a seawater-resistant V4A stainless steel front are supplied as standard. All modules are also available as OEM versions to create call stations with customised front panels or for seamless integration into various systems (e.g. alarm panels, ship bridges, etc.).

KEY FEATURES:

- Modular IP Intercom Stations for use in maritime environments
- Seawater-resistant V4A stainless steel front
- High-resolution integrated wide-angle colour video camera
- Daylight-compatible touch displays with brilliant reproduction
- OpenDuplex® and IVC for natural, hands free communication with high volume
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Developed and designed in accordance with the latest regulations of the International Maritime Organisation (IMO)



W × H mm

Stations with 2 Modules	131.5 × 241.5
Stations with 3 Modules	131.5 × 351.5
Station Modules	95 × 95
OEM Modules	95 × 95



MARITIME INTERCOM STATIONS - 2 MODULES



VIP1 AK V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, full keypad and function keys



VIP1 AF V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker and one call button with labelling field



VIP1 AG V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker and two call buttons with labelling field



VIP1 AH V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker and three call buttons with labelling field



VIP2 AL V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, 3.5-inch touch display with light sensor and proximity sensor



MARITIME INTERCOM STATIONS - 3 MODULES



VIP2 ACF V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, camera and one call button with labelling field



VIP2 ACG V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, camera and two call buttons with labelling field



VIP2 ACH V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, camera and three call buttons with labelling field



VIP2 ACK V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, camera, full keypad and function keys



VIP2 ACL V4

Maritime Intercom Station with V4A stainless steel front, loudspeaker, camera, 3.5-inch touch display with light sensor and proximity sensor



MARITIME INTERCOM STATIONS - BRIDGE CONSOLES



MASTER 6PTT

Bridge Console with: SIP Module Advanced Plus, Loudspeaker, 2x PBS3, BC with PPT Buttons, Gooseneck or MIC



MAST AHK PTT

Bridge Console with: SIP Module Advanced Plus, Loudspeaker, PBS3, BC with PPT Buttons, full keypad and Goosneck MIC



MAST AHL PTT

Bridge Console with: SIP Module Advanced Plus, Loudspeaker, PBS3, BC with PPT Buttons, TD03 and Goosneck MIC



MARITIME INTERCOM STATIONS - HEAVY DUTY



MIP2 504S

Maritime industrial Intercom Station with full keypad, 4 function keys and loudspeaker - with main module 'Advanced'

SIP IP66 IK10 2 1 PoE



MIP2 504S IO

Maritime industrial Intercom Station with full keypad, 4 function keys and loudspeaker - with main module 'Advanced' and IO extension module

SIP IP66 IK10 10 9 PoE



MIP3 504S

Maritime industrial Intercom Station with full keypad, 4 function keys and loudspeaker - with main module 'Plus'

SIP IP66 IK10 4 2 PoE



MIP3 504S IO

Maritime industrial Intercom Station with full keypad, 4 function keys and loudspeaker - with main module 'Plus' and IO extension module

SIP IP66 IK10 12 10 PoE



MIP2 008S

Maritime industrial Intercom Station with 8 function keys and loudspeaker - with main module 'Advanced'

SIP IP66 IK10 2 1 PoE



MIP2 008S IO

Maritime industrial Intercom Station with 8 function keys and loudspeaker - with main module 'Advanced' and IO extension module

SIP IP66 IK10 10 9 PoE



MIP3 008S

Maritime industrial Intercom Station with 8 function keys and loudspeaker - with main module 'Plus'

SIP IP66 IK10 4 2 PoE



MIP3 008S IO

Maritime industrial Intercom Station with 8 function keys and loudspeaker - with main module 'Plus' and IO extension module

SIP IP66 IK10 12 10 PoE



MIP2 P04S

Maritime industrial Intercom Station with party-line keypad, 4 function keys and loudspeaker - with main module 'Advanced'

SIP IP66 IK10 2 1 PoE



MIP2 P04S IO

Maritime industrial Intercom Station with party-line keypad, 4 function keys and loudspeaker - with main module 'Advanced' and IO extension module

SIP IP66 IK10 10 9 PoE



MIP3 P04S

Maritime industrial Intercom Station with party-line keypad, 4 function keys and loudspeaker - with main module 'Plus'

SIP IP66 IK10 4 2 PoE



MIP3 P04S IO

Maritime industrial Intercom Station with party-line keypad, 4 function keys and loudspeaker - with main module 'Plus' and IO extension module

SIP IP66 IK10 12 10 PoE

MARITIME INTERCOM MODULES



MUN LS10 V4H

5-watt speaker module with V4A stainless steel front and LED ring (RGB) - for landscape installation



MUN LS10 V4V

5-watt speaker module with V4A stainless steel front and LED ring (RGB) - for portrait installation



MUN CAM1 V4

Camera module with V4A stainless steel front



MUN PBS1 V4

Key module with V4A stainless steel front and one call button with labelling field



MUN PBS2 V4

Key module with V4A stainless steel front and two call buttons with labelling field



MUN PBS3 V4

Key module with V4A stainless steel front and three call buttons with labelling field



MUN KB16 V4

Key module with V4A stainless steel front, full keypad and function keys



MUN TD03

Display module with 3.5-inch touch display with light sensor and proximity sensor



MUN BCOV V4

Dummy module with V4A stainless steel front



MUN BCOV PS

Dummy module with PVC front - stainless steel look



MUN BCOV P

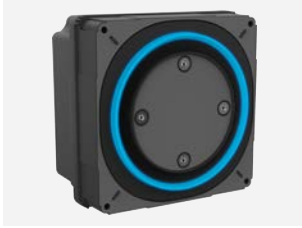
Dummy module with PVC front - black



MUN MICS

Microphone module with two digital MEMS microphones

MARITIME INTERCOM MODULES - OEM



MUN LS10 OEM

5-watt speaker module with LED ring (RGB) - OEM version



MUN CAM1 OEM

Camera module - OEM version



MUN PBS1 OEM

Key module with one call button with labelling field - OEM version



MUN PBS2 OEM

Key module with two call buttons with labelling field - OEM version



MUN PBS3 OEM

Key module with three call buttons with labelling field - OEM version



MUN KB16 OEM

Key module with full keypad and function keys - OEM version



MARITIME INTERCOM MODULES - OEM BRIDGE CONSOLES



BRIDGESET OEM 1

OEM Bridge Console with: MUN CPU2, MUN LS10 OEM, MUN MICS und MUN IO08



MARITIME INTERCOM MAIN MODULES



MUN CPU1

Main module 'Basic' for building maritime IP Intercom Stations with push-button modules

SIP



MUN CPU2

Main module 'Advanced' for building maritime IP Intercom Stations with push-button modules, camera and touch display

SIP 2 PoE



MUN CPU3

Main module 'Plus' with integrated Intercom Server for building maritime IP Intercom Stations with push-button modules, camera and touch display

SIP 4 2 USB PoE

MARITIME INTERCOM EXTENSION MODULES



MUN IO08

Remote I/O module for maritime environments

8 8



EB AUD

Extension Board for maritime environments for external audio devices

MARITIME INTERCOM SERVER

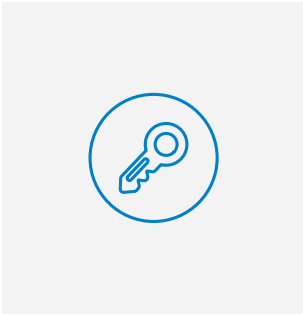


MUN SSER

Maritime Intercom Server for top-hat rail mounting



MARITIME INTERCOM SERVER - IP SUBSCRIBER LICENCES



M-LIC-STA-S5

Licence for 5 SIP subscribers, feature level 'Standard'

M-LIC-STA-S10

Licence for 10 SIP subscribers, feature level 'Standard'

M-LIC-STA-S20

Licence for 20 SIP subscribers, feature level 'Standard'

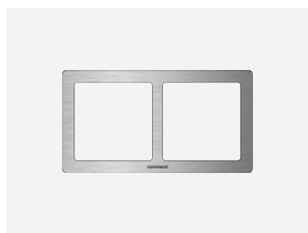
M-LIC-STA-S50

Licence for 50 SIP subscribers, feature level 'Standard'

M-LIC-STA-S100

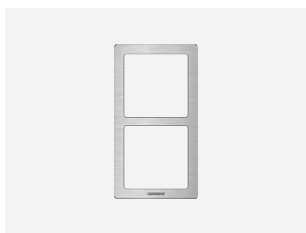
Licence for 100 SIP subscribers, feature level 'Standard'

ACCESSORIES



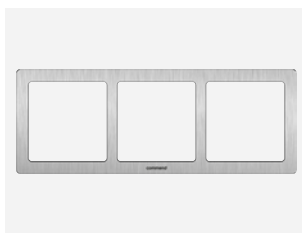
EUN DF2S V4V

V4A stainless steel frame for 2 modules - for portrait installation



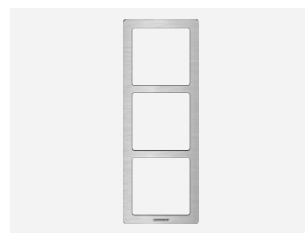
EUN DF2S V4H

V4A stainless steel frame for 2 modules - for landscape installation



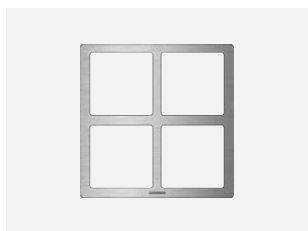
EUN DF3S V4V

V4A stainless steel frame for 3 modules - for portrait installation



EUN DF3S V4H

V4A stainless steel frame for 3 modules - for portrait installation



EUN DF22S V4H

V4A stainless steel frame for 4 modules



EUN OKEY

Tool for easy opening of Intercom stations from the Ognios Series



EUN FH2S

Mounting kit for flush-mounting Ognios Series Intercom stations - for 2 modules



EUN FH3S

Mounting kit for flush-mounting Ognios Series Intercom stations - for 3 modules



EUN MFSH2

Mounting kit for ORS 2 cavity wall and flush mounting of Ognios Series Intercom stations - for 6 modules



EUN MFSH3

Mounting kit for ORS 3 cavity wall and flush mounting of Ognios Series Intercom stations - for 8 modules

DISPLAY CABLE - EUN CDS



EUN CDS1

Flat ribbon cable for display -
Length: 10 cm

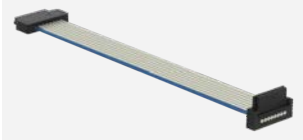
EUN CDS2

Flat ribbon cable for display -
Length: 20 cm

EUN CDS3

Flat ribbon cable for display -
Length: 50 cm

MICROPHON CABLE - EUN CMS



EUN CMS1

MiniBridge cable 8-pin for
microphone - Length: 10 cm

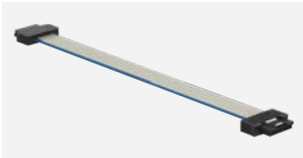
EUN CMS2

MiniBridge cable 8-pin for
microphone - Length: 20 cm

EUN CMS3

MiniBridge cable 8-pin for
microphone - Length: 50 cm

SYSTEM BUS OR SPEAKER CABLE - EUN CSS



EUN CSS1

MiniBridge cable 6-pin for
system bus or loudspeaker -
Length: 10 cm

EUN CSS2

MiniBridge cable 6-pin for
system bus or loudspeaker -
Length: 20 cm

EUN CSS3

MiniBridge cable 6-pin for
system bus or loudspeaker -
Length: 50 cm

SOFTWARE INTERCOM SERVER - VIRTUOSIS



The world's first 100% software-based Intercom Server VirtuoSIS by Commend is designed specifically to integrate seamlessly into the flexible, dynamic world of virtual IT environments. This is where it really comes into its own, providing the same functionality as its hardware-based counterparts at attractively low initial and operating costs. As a 'fellow inhabitant' of the virtual server landscape without the need for any separate hardware, the Software Intercom Server is child's play to maintain and requires no separate staff resources. Embedded into the virtual server infrastructures, the server can take advantage of the usual extra-high backup and security mechanisms. This automatically ensures the essential high availability that has become a hallmark of Commend solutions. To provide custom-tailored solutions for all system sizes, Software Intercom Server VirtuoSIS comes in two versions: VirtuoSIS Starter and VirtuoSIS Professional.

KEY FEATURES:

- Linux (Debian) based Software Intercom Server for virtualised IT platforms
- Ready for use in virtualisation environments vSphere by VMWare, Hyper-V by Microsoft and Acropolis (AOS) by Nutanix
- Ultimate availability and security
- Flexible licensing options - easy system extension options available at the click of a mouse
- Intercom systems for up to 25,000 subscriber units (VirtuoSIS Professional)
- Supports IP-based, digital and analogue Intercom Stations
- Supports Commend Symphony Devices as well as third-party SIP telephones
- VoIP integration via SIP trunk connection to IP telephone systems and service providers
- VoIP integration with public telephone network via SIP gateways
- IPv6 ready
- Supports all Intercom functions and feature levels
- Networkable via LAN/WAN, also with hardware Intercom Servers S6, S3, GE 800 and GE 300
- IP interfaces: ICX via IP, RTP/SRTP, IoIP®, SIP/SIPS
- Convenient configuration via PC software CCT
- Symphony Bridge enables seamless integration with Symphony Cloud services, offering support for Mobile Clients, the Web Client, and future Cloud Services.

VMware

Microsoft

Nutanix

BASIC LICENCES - VIRTUOSIS



L-SIS-PRO

VirtuoSIS Basic Professional Licence (V.x) for up to 10 VirtuoSIS instances

SIS32-PRO

VirtuoSIS Basic Starter Licence (V.x) for 1 VirtuoSIS instance with up to 32 subscriber units



UPGRADE LICENCES - VIRTUOSIS



L-SIS32-UPG

Licence for Upgrade of VirtuoSIS Starter to VirtuoSIS Professional

L-UG-1D

Upgrade Licence for 1 subscriber unit (VoIP or SIP subscriber), feature level D

L-UG-8B

Licence for upgrade of up to 8 subscriber units from feature level A to feature level B (SIP subscribers only)

IP SUBSCRIBER LICENCES - VIRTUOSIS



L-SIS-IP-2B

Licence for 2 subscriber units, feature level B

L-SIS-IP-8B

Licence for 8 subscriber units, feature level B

L-SIS-IP-32B

Licence for 32 subscriber units, feature level B

L-SIS-IP-2D

Licence for 2 subscriber units, feature level D

L-SIS-IP-8D

Licence for 8 subscriber units, feature level D



SIP SUBSCRIBER LICENCES - VIRTUOSIS



L-SIS-SIP-8A

Licence for 8 SIP subscriber units, feature level A

L-SIS-SIP-2B

Licence for 2 SIP subscriber units, feature level B

L-SIS-SIP-8B

Licence for 8 SIP subscriber units, feature level B

L-SIS-SIP-2D

Licence for 2 SIP subscriber units, feature level D

L-SIS-SIP-8D

Licence for 8 SIP subscriber units, feature level D



SIP TRUNK LICENCES - VIRTUOSIS



L-SIS-SIPT8B

Licence for SIP Trunk, 8 Channels, feature level B

L-SIS-SIPT1D

Licence for SIP Trunk, 1 channel, feature level D

L-SIS-SIPT8D

Licence for SIP Trunk, 8 Channels, feature level D



NETWORK LICENCES - VIRTUOSIS



L-SIS-LAN-4

Licence for 4 LAN connections

L-SIS-LAN-8

Licence for 8 LAN connections

L-SIS-WAN-8

Licence for 8 WAN connections

L-SIS-MI

Licence for additional network interface

INTERFACE LICENCES - VIRTUOSIS



L-SIS-ICX

Licence for 1 ICX Interface

L-SYM-BRIDGE

Licence for Cloud Connection via Symphony Bridge

INTERCOM SERVERS - S SERIES



“ The ultimate Intercom Appliance

Commend's powerful all-in-one Intercom Appliance Series brings to regular server rooms what used to be limited to specialised IT environments: the full spectrum of VirtuoSIS technology, and more – in the form of a compact all-in-one hardware and software package. Series S Intercom Servers S3 and S6 ensure continuous operation and ultimate system availability.

KEY FEATURES:

- VirtuoSIS Intercom Server Software already pre-installed
- Casing suitable for wall mounting or installation in 19-inch server racks
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- The communication application integrates smoothly with existing IT infrastructures
- Full-range performance and flexible licensing for VirtuoSIS Intercom Server software
- Physical separation of IT and communication server (as opposed to virtual Intercom solution)
- Extremely low operating costs, thanks to high energy efficiency



W × H × D (mm)

S6

427 × 45 × 572

S3

250 × 52 × 191



max. Subscriber

S6: IP

448

S3: IP

224

INTERCOM SERVER - S SERIES



S6

Powerful, rack mountable Intercom Server with pre-installed Intercom Server-Software VirtuoSIS



S3

Compact Intercom Server with pre-installed Intercom Server Software VirtuoSIS



LICENCES AND EXPANSION LEVELS

For details on available software licences, see VirtuoSIS Software Intercom Server

VIRTUOSIS LINK - LINK TO DIGITAL 2-WIRE STATIONS



SIS-LINK-8

IP connectivity unit to connect up to 8 digital 2-wire Intercom stations to a VirtuoSIS based server



PF-RM-1HE

19" rack mounting kit for one or two VirtuoSIS Link and AF 50 Amplifiers side by side or for rack mounting of one AF 125, AF 250 and AF 500 Amplifier - Height: 1U



PF-WM

Wall and desktop mounting kit for VirtuoSIS Link or AF 50, AF 125, AF 250 and AF 500 Amplifier

ACCESSORIES



RM-S3-2RU

19-inch Rack Mounting Kit for one Intercom Server S3 - height: 2 HU



PA1-S3

65 Watt Desktop Power Adapter, input: 100-240 VAC, output: 19 VDC with barrel connector; cable length: 1.8Vm (IEC cable KAB-C7 not included)



PA1-S6

300 Watt pluggable Power Supply for S6 Servers, input: 100-240 VAC with IEC-60320-C14 connection (IEC cable KAB-C13 not included)

IEC CABLE C7



KAB-C7-AU

IEC cable C7, version for Australia; length: 2.0 m

KAB-C7-EU

IEC cable C7, version for Europe; length: 2.0 m

KAB-C7-UK

IEC cable C7, version for UK; length: 2.0 m

KAB-C7-US

IEC cable C7, version for USA; length: 2.0 m

IEC CABLE C13



KAB-C13-AU

IEC cable C13, version for Australia; length: 1.5 m

KAB-C13-EU

IEC cable C13, version for Europe; length: 1.5 m

KAB-C13-UK

IEC cable C13, version for UK; length: 1.5 m

KAB-C13-US

IEC cable C13, version for USA; length: 1.5 m

INTERCOM SERVER IN 19" TECHNOLOGY - GE 800

📖 The rugged classic for
XXL-Intercom solutions



Intercom Server for up to 25,000 subscribers within local network. Connection support for IP-based digital and analogue Intercom stations and SIP/VoIP telephones. Casing in stylish industrial design (3 HU) for installation in 19" racks. Built-in functions for door and gate control, video communication, Control Desk, etc. Support for a wide range of networking concepts enable security and communication systems with up to 14,280 networked Intercom Servers. This allows up to 30,000 subscriber units to communicate over these networks. If required, calls can also be forwarded to a public telephone network, e.g. via VoIP.

KEY FEATURES:

- Easy installation and startup
- Casing in stylish industrial design, suitable for installation in 19" server racks
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Support for up to 14,280 GE 800 servers on the same network
- Suitable for all types of Intercom stations (IP-based, digital or analogue)
- Convenient configuration via PC software (included)



W × H × D (mm)

GE 800 483 × 133 × 229



max. Subscribers

IP 896

Digital, 2-wire 56

Analogue, 4-wire 56

INTERCOM SERVER – GE 800



GE 800

Intercom Server, suitable for 19" racks, with 14 free plug-in slots in euroboard format, without power supply unit

GE 800UK

Intercom Server, suitable for 19" racks, with 14 free plug-in slots in euroboard format, including power supply unit (UK)

GE 800AU

Intercom Server, suitable for 19" racks, with 14 free plug-in slots in euroboard format, including power supply unit (AU)

GE 800UL

Intercom Server with UL certification, suitable for 19" racks, with 14 free plug-in slots in euroboard format, without power supply unit

GE 800EU

Intercom Server, suitable for 19" racks, with 14 free plug-in slots in euroboard format, including power supply unit (EU)



SERVER LICENCES – GE 800



L8-PRO6U

Licence for PRO 800 Upgrade to Version 6.x

L8-NETLAN8

Licence for 8 LAN connections

L8-ICX

Licence for 1 ICX Interface

L8-NETWAN4

Licence for 4 WAN connections

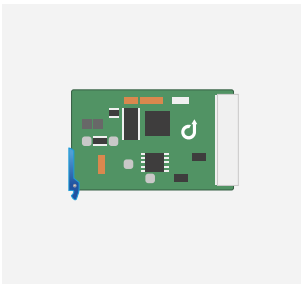
L8-NETLAN4

Licence for 4 LAN connections

L8-NETWAN8

Licence for 8 WAN connections

PLUG-IN-SERVERS – G8-IP-32



G8-IP-32

GE 800 Plug-in Server Card for connection of up to 64 IP subscriber units

L8-IP-32PRO6U

Licence for PRO 800 Upgrade to Version 6.x

L8-IP-32-2D

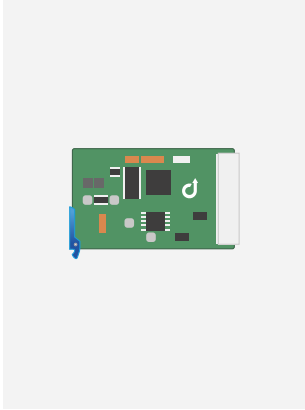
Upgrade Licence for 2 subscriber units, feature level D

L8-IP-32-32B

Upgrade Licence for 64 subscriber units feature level D



SUBSCRIBER CARD - G8-IP



G8-IP-4B

GE-800 Subscriber Card for 4 IP subscriber units, feature level B

L8-IP-4D

Licence for 4 subscriber units, feature level D

L8-IP-4P

Licence for 4 subscriber units, feature level P

L8-IP-8B

Licence for 8 subscribers, feature level B

L8-IP-8D

Licence for 8 subscriber units, feature level D

L8-IP-8P

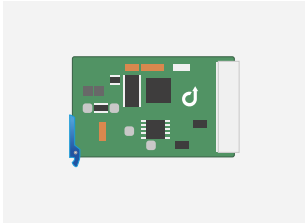
Licence for 8 subscriber units, feature level P

L-IP-REC1

Licence for 1 IP/RPT recording channel for call recording



SUBSCRIBER CARD - G8-GED



G8-GED-4B

GE-800 Subscriber Card for 4 digital subscriber units, feature level B

L8-GED-4D

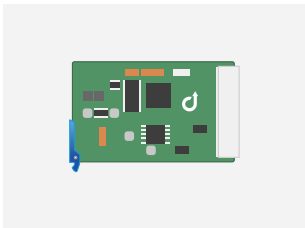
Licence for 4 subscriber units, feature level D

L8-GED-4P

Licence for 4 subscriber units, feature level P

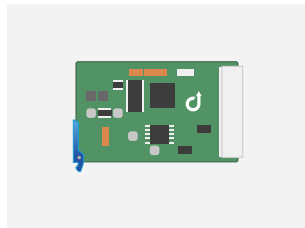


INPUT/OUTPUT CARDS - SERIES G8



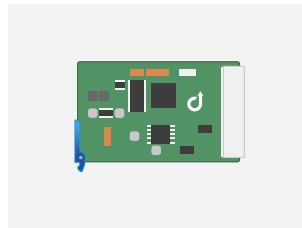
G8-16A

GE 800 Plug-in Card with 16 relay outputs



G8-16E

GE-800 Plug-in Card with 16 inputs

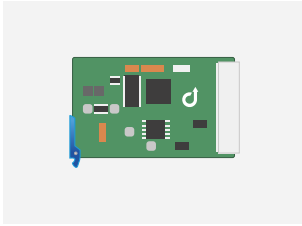


G8-8E8A

GE 800 Plug-in Card with 8 inputs and 8 relay outputs



INTERFACE CARD - G8-IF



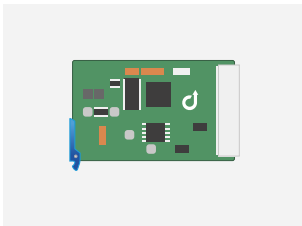
G8-IF

GE 800-IP Interface Card with 2 virtual TCP/IP interface ports and 2 RS-232 interface ports

L8-IF-ICX

Licence for one additional ICX Interface (maximum is 6)

INTERFACE CARD - G8-AUD



G8-AUD-4B

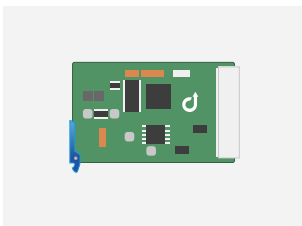
GE 800 Audio Interface Card with 4 channels, feature level B

L8-AUD-4D

Licence for 4 Channels, feature level D



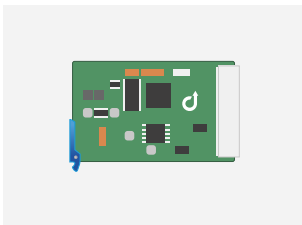
INTERFACE CARD - G8-TEL



G8-TEL

GE-800 telephone interface card for one analogue subscriber unit of a telephone system or one trunk line

NETWORKING CARD - G8-LAN



G8-LAN-8

GE 800 Network Card for 8 LAN connections

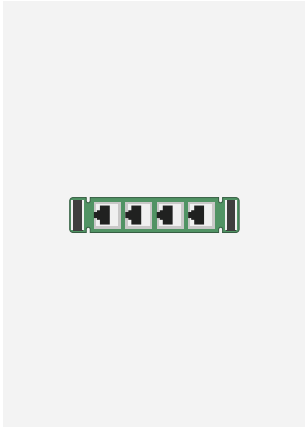
L8-LAN-16

Licence for 16 LAN connections

L8-WAN-8

Licence for 8 WAN connections

INSTALLATION BOARDS – SERIES G8



G8A-C

Installation Board with 4 shielded RJ-45 ports for Plug-in Cards G8-GED, G8-GET and G8-AUD

G8A-CP

Installation Board with 4 shielded RJ-45 ports and power supply input for Plug-in Card G8-GED

G8A-I

Installation Board with 37-pin D-SUMBIN port for Plug-in Cards G8-GED, G8-GET, G8-TEL, G8-16A, G8-16E, G8-8E8A and G8-AUD

G8A-K

Installation Board with screw terminals for Plug-in Cards G8-GED, G8-GET, G8-16A, G8-16E, G8-8E8A and G8-AUD

G8A-T

Double Installation Board with 37-pin D-SUMBIN port for Plug-in Cards G8-GED, G8-GET and G8-AUD

G8A-GEN2

Installation board with 2 low voltage inputs for two redundant power supply units

CONNECTION CABLE ASK 32



ASK32-5

32-stranded connection cable with D-SUMBIN connector, suitable for direct installation on LSA Plus connection modules; length: 5.0 m

ASK32-10

32-stranded connection cable with D-Sumbin connector, suitable for direct installation on LSA Plus connection modules; length: 10.0 m

ASK32-20

32-stranded connection cable with D-SUMBIN connector, suitable for direct installation on LSA Plus connection modules; length: 20.0 m

COMPACT INTERCOM SERVER - GE 300


Compact and network-ready




Intercom Server GE 300 is ideally suited as a stand-alone server for small and medium-sized Intercom applications or as network node in large Intercom networks. It provides connection support for IP-based digital and analogue Intercom stations and SIP/VoIP telephones. The compact housing is suitable for wall mounting. Built-in functions for door and gate control, alarm, video communication, Control Desk, etc. Support for a wide range of networking concepts enable security and communication systems with up to 14,280 networked Intercom Servers. This allows up to 25,000 subscriber units to communicate over these networks.

KEY FEATURES:

- Easy installation and startup
- Compact designer casing for wall mounting
- Crystal clear sound with up to 16 kHz eHD Voice speech quality
- Support of up to 14,280 servers on the same network
- Suitable for all types of Intercom stations (IP-based, digital or analogue)
- Convenient configuration via PC software (included)

	W × H × D (mm)
GE 300	310 × 210 × 77.5
GEZ 300	310 × 210 × 77.5
GEI 300	310 × 210 × 77.5

	max. Subscribers
IP	40
Digital, 2-wire	20
Analogue, 4-wire	20

	max. Subscribers with GEZ 300
IP	40
Digital, 2-wire	20
Analogue, 4-wire	20

INTERCOM SERVER - GE 300



GE 300

Intercom Server with 5 free plug-in slots, without power supply unit

GE 300WR

Intercom Server with 5 free plug-in slots, without power supply unit, with 20-36 VDC wide-range input

GE 300EU

Intercom Server with 5 free plug-in slots, including power supply unit (EU)

GE 300CA

Intercom Server with 5 free plug-in slots, including power supply unit (AU/UK/US)



SERVER LICENCES - GE 300



L3-ICX

Licence for 1 ICX Interface

L3-LAN-4

Licence for 4 LAN connections

L3-PRO6U

Licence for PRO 800 Upgrade to Version 6.x

EXPANSION CASINGS - GEZ 300 | GEI 300



GEZ 300

Expansion casing with 5 free plug-in slots for G3 cards, without power supply unit

GEZ 300UK

Expansion casing with 5 free plug-in slots for G3 cards, including power supply unit (UK)

GEZ 300AU

Expansion casing with 5 free plug-in slots for G3 cards, including power supply unit (Australia)

GEZ 300US

Expansion casing with 5 free plug-in slots for G3 cards, including power supply unit (US)

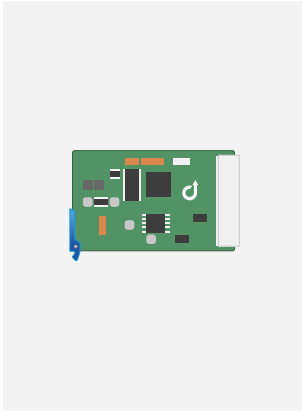
GEZ 300EU

Expansion casing with 5 free plug-in slots for G3 cards, including power supply unit (Europe)

GEI 300

Expansion casing with 2 free plug-in slots for G8 interface cards (euroboard format)

SUBSCRIBER CARD - G3-IP



G3-IP-4B

GE 300 Subscriber Card for 4 IP subscriber units, feature level B

L3-IP-4D

Licence for 4 subscriber units, feature level D

L3-IP-4P

Licence for 4 subscriber units, feature level P

L3-IP-8B

Licence for 8 subscribers, feature level B

L3-IP-8D

Licence for 8 subscriber units, feature level D

L3-IP-8P

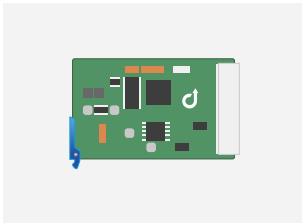
Licence for 8 subscriber units, feature level P

L-IP-REC1

Licence for 1 IP/RPT recording channel for call recording



SUBSCRIBER CARD - G3-GED



G3-GED-4B

GE 300 Subscriber Card for 4 digital subscriber units, feature level B

L3-GED-4D

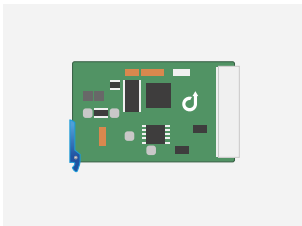
Licence for 4 subscriber units, feature level D

L3-GED-4P

Licence for 4 subscriber units, feature level P

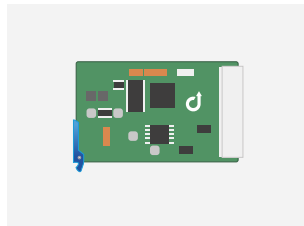


INPUT/OUTPUT CARDS - SERIES G3



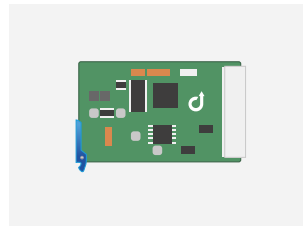
G3-16A

GE 300 Plug-in Card with 16 relay outputs



G3-16E

GE 300 Plug-in Card with 16 inputs

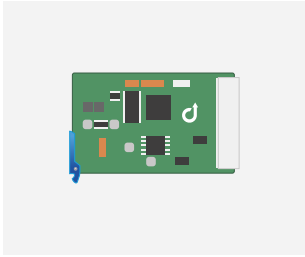


G3-8E8A

GE 300 Plug-in Card with 8 inputs and 8 relay outputs



NETWORKING CARD - G3-LAN



G3-LAN-8

GE 300 Network Card for 8 LAN connections

L3-LAN-16

Licence for 16 LAN connections

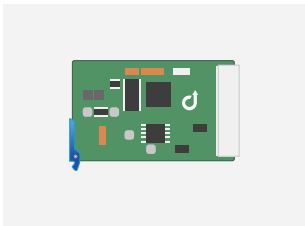
L3-WAN-4

Licence for 4 WAN connections

L3-WAN-8

Licence for 8 WAN connections

INTERFACE CARD - G3-IF



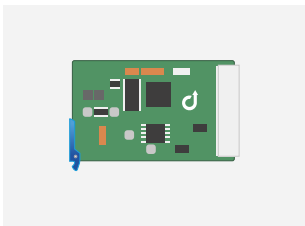
G3-IF

GE 300-IP Interface Card with 2 virtual TCP/IP interface ports and 2 RS-232 interface ports

L3-IF-ICX

Licence for one additional ICX Interface (maximum is 6)

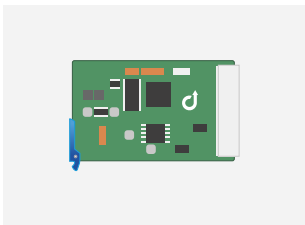
INTERFACE CARD G3-TEL



G3-TEL

GE 300 Telephone Interface Card for one analogue subscriber unit of a telephone system or one trunk line

INTERFACE CARD G3-AUD



G3-AUD-4B

GE 300 Audio Interface Card with 4 channels, feature level B

L3-AUD-4D

Licence for 4 Channels, feature level D



ACCESSORIES



PA1-230V

EU transformer, input: 230 VAC with cable and EU plug; cable length: 1.1 m, output: 21.8 VAC with open cable tails; cable length: 2.5 m



PA30W24V-EU

30 Watt plug-in power supply unit, input: 100-240 VAC with solid EU plug, output: 24 VDC with open cable tails; cable length: 1.5 m



PA30W24V-CA

30 Watt plug-in power supply unit, input: 100-240 VAC with exchangeable connectors (AU/UK/US), exit: 24 VDC with open cable tails; cable length: 1.5 m



PA60W24V

60 Watt Desktop Power Supply, input: 100-240 VAC with IEC-60320-C14 connection, output: 24 VDC with open cable tails - cable length: 1.5m (IEC cable KAB-C13 not included)

IEC CABLE C13



KAB-C13-AU

IEC cable C13, version for Australia; length: 1.5 m

KAB-C13-EU

IEC cable C13, version for Europe; length: 1.5 m

KAB-C13-UK

IEC cable C13, version for UK; length: 1.5 m

KAB-C13-US

IEC cable C13, version for USA; length: 1.5 m

ACCESSORIES



IP CONVERTER



IP-BRIDGE

IP converter box with metal housing for extending the Ethernet network via 2-wire connections

GOOSENECK MICROPHONE – SERIES MIC 800 | MIC 473



MIC 800

Cardioid gooseneck microphone for connection via RJ10 Western plug

MIC 800SWJ

Cardioid gooseneck microphone for connection via 3.5 mm jack plug

MIC 473

Cardioid gooseneck microphone for connection to screw terminals

SURFACE-MOUNTABLE MICROPHONE – SERIES MIC Q400



MIC Q400

Surface-mountable cardioid microphone and impact-protected polycarbonate casing, for connection to screw terminals; cable length: 2.8 m

MIC Q400AJ

Surface-mountable cardioid microphone for connection to 3.5 mm jack plug; cable length: 2.8 m

INSTALLABLE MICROPHONES – SERIES MIC 480



MIC 480

Installable electret microphone with omnidirectional directivity, for connection to screw terminals; cable length: 4 m

MIC 480AJ

Installable electret microphone with omnidirectional directivity, for connection via 3.5 mm jack plug; cable length: 4 m

MIC 480S-08

Installable electret microphone with omnidirectional directivity, for connection to screw terminals; cable length: 0.8 m

MIC 480S-12

Installable electret microphone with omnidirectional directivity, for connection to screw terminals; cable length: 1.2 m



MICROPHONE WIND GUARD – WINDBRUSH



WIND MIC 480

windBRUSH – Microphone wind guard in unique brush design, suitable for MIC 480

HEADSETS



HS 1

Wired Headset for compatible devices, for connection via QD plug; adaptor cable to be ordered separately



KAB-HS1-RJ

Adaptor Cable QD to RJ10 for headset HS 1, for connection to devices with headset port; cable length: 0.5 m to 2 m (coiled cable)

POWER OVER ETHERNET



PA25WPOE-DC

25 Watt PoE Injector, input: 24-48 VAC, optimised for Series WS & Concerto Mounting Kits



POE-SPLIT

PoE-Split Power Adapter, input: PoE (15,4/30/60 W), output: PoE+ (30 W) and 12VVDC (19 W)



POE-SPLIT-M

Mounting kit for one PoE-Split Power Adapter POE-SPLIT



PA15WPOE

15 Watt PoE Injector, input: 100-240 VAC, with exchangeable plugs (AU/EU/UK/US)

TRANSFORMERS



PA1-S3

65 Watt Desktop Power Adapter, input: 100-240 VAC, output: 19 VDC with barrel connector; cable length: 1.8Vm (IEC cable KAB-C7 not included)



PA1-S6

300 Watt pluggable Power Supply for S6 Servers, input: 100-240 VAC with IEC-60320-C14 connection (IEC cable KAB-C13 not included)



PA1-230V

EU transformer, input: 230 VAC with cable and EU plug; cable length: 1.1 m, output: 21.8 VAC with open cable tails; cable length: 2.5 m

POWER SUPPLY UNITS



PA24W15V-CA

24 Watt plug-in power supply unit, input: 100–240 VAC with exchangeable plugs (AU/EU/UK/US), output: 15 VDC with angled barrel connector; cable length: 2.0 m



PA24W30V-CA

24 Watt plug-in power supply unit, input: 100–240 VAC with exchangeable plugs (AU/UK/US), output: 30 VDC with angled barrel connector; cable length: 2.0 m



PA24W30V-EU

24 Watt plug-in power supply unit, input: 100–240 VAC with solid EU plug, output: 30 VDC with angled barrel connector; cable length: 2.0 m



PA30W12V

30 Watt Plug-in Power Supply, input: 100–240 VAC, with exchangeable plugs (AU/EU/UK/US), output: 12 VDC, with barrel connector; cable length: 2.5 m



PA30W15V

30 Watt desktop power adapter, input: 100–240 VAC with IEC-60320-C14 connector, output: 15 VDC with barrel connector; cable length: required 1.5m IEC cable (KAB-C13) not included



PA30W24V-CA

30 Watt plug-in power supply unit, input: 100–240 VAC with exchangeable connectors (AU/UK/US), output: 24 VDC with open cable tails; cable length: 1.5 m



PA30W24V-EU

30 Watt plug-in power supply unit, input: 100–240 VAC with solid EU plug, output: 24 VDC with open cable tails; cable length: 1.5 m



PA60W24V

60 Watt Desktop Power Supply, input: 100–240 VAC with IEC-60320-C14 connection, output: 24 VDC with open cable tails – cable length: 1.5m (IEC cable KAB-C13 not included)



PA65W48V

65 Watt Desktop Power Supply, input: 100–240 VAC, IEC-60320-C14 connector, output: 48 VDC, open cable tails; cable length: 1.5 m, IEC cable (KAB-C13) not included

IEC CABLE C7



KAB-C7-AU

IEC cable C7, version for Australia; length: 2.0 m

KAB-C7-EU

IEC cable C7, version for Europe; length: 2.0 m

KAB-C7-UK

IEC cable C7, version for UK; length: 2.0 m

KAB-C7-US

IEC cable C7, version for USA; length: 2.0 m

IEC CABLE C13



KAB-C13-AU

IEC cable C13, version for Australia; length: 1.5 m

KAB-C13-EU

IEC cable C13, version for Europe; length: 1.5 m

KAB-C13-UK

IEC cable C13, version for UK; length: 1.5 m

KAB-C13-US

IEC cable C13, version for USA; length: 1.5 m

CONNECTION CABLE ASK 32



ASK32-5

32-stranded connection cable with D-SUMBIN connector, suitable for direct installation on LSA Plus connection modules; length: 5.0 m

ASK32-10

32-stranded connection cable with D-Sumbin connector, suitable for direct installation on LSA Plus connection modules; length: 10.0 m

ASK32-20

32-stranded connection cable with D-SUMBIN connector, suitable for direct installation on LSA Plus connection modules; length: 20.0 m

NETWORK CABLES



ASKKAT5-3S

Network cable, Cat. 5, shielded; length: 3.0 m



RJ45-MONT

Ethernet Adaptor for fastening a rigid connection cable into a Mounting Kit; length: 0.3Vm

COMMEND CERTIFIED INTERFACES



Where security and communication systems are concerned, it is essential for the many different components to work together smoothly. A constant exchange of data, video and audio streams allows these systems to utilise their full potential and enable perfectly integrated solutions for the benefit of the customer.

OUR TECHNOLOGY PARTNER PROGRAMME

Let's join forces to provide solutions and mutually complementary systems.

- **Satisfied customers** - Smart systems complement each other to provide customers with the tailored solutions they want
- **A partnership with many benefits** - Joint marketing of our interfaces and solutions allows us to open up bigger markets. Take advantage of our worldwide distribution network.
- **Quality and reliability** - Our laboratories perform trials and run tests on new versions to ensure sustained high compatibility and quality standards. Results are documented and certified - see our "Certified" programme for details.
- **Certification** - This provides reassurance for customers and facilitates the sales process.
- **Support and contact** - Our Technology Partners benefit from constantly available contact and support services. Together we can advance new ideas, solutions and innovations.
- There is so much for us to achieve together!

For further information about our Technology Partner programme visit us online in our "Integration Zone":

integration.commend.com

SELECTION OF COMMEND TECHNOLOGY PARTNERS



For a complete list of our Technology Partners visit us online in our "Integration Zone":

integration.commend.com



COMOPC UA SERVER



In building automation, systems such as fire and burglar alarm systems, ventilation equipment, and many others are connected to a main building management system over a standardised OPC (Open Connectivity) interface. Virtually all building management systems on the market support OPC. Commend's ComOPC Server provides the central hub that interlinks the Intercom system to the OPC Clients to provide them with the required communication capabilities. The ComOPC Server interprets the ICX messages from the Intercom System and transcodes them into data points that the OPC Clients can process. The ComOPC UA Server is also listed on the OPC Foundation's website: www.opcfoundation.org

COMOPC-UA SERVER LICENCES



OPC-100-SPD

Licence for 100 Intercom Objects

OPC-1000-SPD

Licence for 1000 Intercom Objects

COMPLC INTERFACE DESIGNER

Smart boost for logic control



With the ComPLC Software Package Commend offers a one-in-all solution that makes controlling third-party systems from within an Intercom system easy, efficient and flexible. The software can also be combined with the Intercom Servers' built-in I/O control functions. This enables direct communication with external systems via standard protocols such as Modbus/TCP (for industrial facilities), KNX (for building management systems) and Commend's proprietary ICX protocol (for Intercom equipment). This makes it easy to custom configure a wide spectrum of processes and control functions and their dependencies within the integrated systems.

Functions:

- Graphics-based Windows application
- Independent execution of custom designed sequences on G8-VOIPSERV and VirtuoSIS
- The G8-VOIPSERV card or virtual VirtuoSIS application card is configured automatically by the ComPLC Designer
- Support of ICX messages
- Support of webhook commands via HTTP
- Configuration of individual functional components
- Ready for KNX interface to connect up to 50 KNX NET/IP gateway devices
- Ready for Modbus interface to connect up to 50 slave devices
- Integrated online mode for monitoring events in real-time

Application examples:

- Automatic e-mail notification of custom defined events
- Scheduled event sequences
- Scheduled automatic volume adjustment for Intercom stations and loudspeakers
- Monitoring of third-party systems via SNMP
- Configuration of sluice management solutions
- and much more...

COMPLC LICENCES



L-PLC-50

Licence for 50 licence-based input/output components (stacking of multiple licences is possible)

L-PLC-200

Licence for 200 licence-based input/output components (stacking of multiple licences is possible)

COMPLC INTERFACES

AVIGILON™

L-PLC-AVIGIL

Licence for configuration of one Avigilon Control Center connection in ComPLC (stacking of multiple licences is possible)

KNX

L-PLC-KNX

Licence for configuration of one KNX connection in ComPLC (stacking of multiple licences is possible)

Modbus

L-PLC-MODBUS

Licence for configuration of one Modbus connection in ComPLC (stacking of multiple licences is possible)



L-PLC-MAIL

Licence for use of the e-mailing function in ComPLC

SNMP

L-PLC-SNMP

Licence for use of the SNMP function in ComPLC

webhooks

L-PLC-WEBCOM

Licence for use of Webhooks in ComPLC

COMPLC SERVER AND STUDIO LICENCES

For details on available server interfaces see Virtuosis Software Intercom Server (see page 108), for Studio interfaces see Studio by Commend (see page 78).

INFORMATION



LEGEND



Compatible with Symphony Cloud



Transmission technology (analogue, digital, loIP, SIP)



Maximum audio bandwidth in kilohertz (kHz)



IP ingress protection rating as per EN 60529



IK impact protection rating as per IECV62262



Number of inputs for floating contacts



Number of relay outputs



Power over Ethernet (PoE) supported



Device with USB port



Device with HDMI port



Maximum sound pressure level in decibel (dB)

EXAMPLE: OD5



IP65

The od5 is protected against ingress of dust and water jets from all directions. The durable design ensures a long product life under outdoor conditions.

IK08

The od5 is IK 08 certified for impact protection. This makes it one of the top-rated outdoor capable Touch Intercom Stations on the market today. The impact resistance provides ideal protection against mechanical influences such as vandalism.

IP - INGRESS PROTECTION RATING

Independent of ambient conditions, electronic equipment must be protected against touch (contact with its parts), ingress of foreign bodies of various sizes, and moisture. To provide a clear specification of equipment protection, the so-called IP protection ratings as per EN 60529 were defined.

IP 65



IK - IMPACT PROTECTION RATING

In electronic engineering, the IK impact protection rating provides a measure of a component's resistance against mechanical impacts and stress. In accordance with IEC 62262, it specifies means of protection by enclosures for electrical equipment against external mechanical impact. The impact protection rating is measured by dropping a steel ball measuring 5 cm in diameter and weighing 500 g onto the device from various heights.

IK 10



	First Numeral	Second Numeral
1	against back of hand; foreign body > 50 mm	against vertically falling water drops
2	against contact with a finger; foreign body > 12 mm	against vertically dripping water (tilted up to 15° from the vertical)
3	against contact with a tool; foreign body > 2.5 mm	against spraying water falling at any angle up to 60° from the vertical
4	against contact with a wire; foreign body > 1 mm	against water splashing against the device from all directions
5	against harmful amounts of dust entering into the device	against water jets protected from a nozzle from all directions
6	against ingress of dust (dust-proof)	against powerful water jets or heavy seas
7	-	against immersion up to 1 m
8	-	against submersion beyond 1 m

	Impact energy in Joule	Drop height of steel ball
IK 00	No protection	
IK 01	0.15	3.1 cm
IK 02	0.20	4.1 cm
IK 03	0.35	7.1 cm
IK 04	0.5	10.2 cm
IK 05	0.7	14.3 cm
IK 06	1.0	20.4 cm
IK 07	2.0	40.8 cm
IK 08	5.0	101.9 cm
IK 09	10.0	203.8 cm
IK 10	20.0	407.7 cm

🗉 Straight to the Source



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Acropolis – Hypervisor solution by Nutanix.

Analogue – Voice signals are transferred between the Intercom server and Intercom stations in analogue format. However, on 4-wire lines (2 wires for the microphone signal and 2 wires for the loudspeaker signal) a digital data stream can be ‘piggy-backed’ on top of this analogue signal (e.g. for display data, dialling information, etc.). Analogue lines are complex, and the longer they are, the more prone to faults they become.

Appliance – This refers to a combination of computer hardware and special hardware-optimized software that is geared towards one specific application.

Client – A collective term for programs and applications that are usually run on workstations, control desks or office PCs. They provide functions for a user’s control and administration of Intercom connections. A “Mobile Intercom Client”, for example, is an application that runs on a mobile device and provides the functions of an Intercom station, control desk etc. in the form of a graphical user interface.

Device Claiming – Connecting a device to Symphony Cloud (e.g. Intercom Station, module or mobile client).

Digital – Voice signal data are exchanged between Intercom servers and Intercom stations in digital format; the required analogue/digital (A/D) and digital/analogue (D/A) converter is built into the Intercom station. Digital voice signal transmission is a basic requirement for networking an Intercom system. When analogue Intercom stations are used, their analogue signals must be digitised by a channel card on the Intercom Server.

DSP – A digital signal processor (DSP) enables the continuous processing of digital signals (e.g. audio or video signals) by means of digital signal processing methods. To process analogue signals, the DSP works in combination with analogue/digital converters and digital/analogue converters.

Duplex – A conversation mode where the Duplex controller (speech balance) switches the speech direction automatically from the speaker to the listener (i.e., from the louder end of the line to the one with the lower sound volume). Loud ambient noise may influence the directional control. In this case, it is necessary to switch the direction manually by pressing a button.

eHD Voice – The quality level of voice transmissions at an audio bandwidth of 16,000 Hz.

Electret microphone – A microphone that uses a semiconductor for sound conversion (capacitive processing). This technology enables small microphone sizes.

Fault tolerance – This describes the ability of a system to handle possible faults and failures (e.g. a power failure). In virtual systems, Fault Tolerance is the name of a known manufacturer’s patented software technology that ensures high-level fail safety. Even if a server fails completely, it ensures continued operation without a noticeable interruption. It does so by instantly switching to a standby server.

Noise-compensating microphone – A microphone whose specific construction allows it to suppress sound that is distant from it (e.g. ambient noise) to transmit sound that is close to it more clearly. This type of microphone is ideal for noisy environments.

Conversation – Voice communication between two Intercom Stations.

Conversational AI – involves AI technologies that enable machines to understand and respond to human language naturally, such as through speech or text. Our Virtual Assistant Ivy is built on Conversational AI, utilizing natural language processing (NLP) and machine learning to interact contextually with users.

Master Station – An Intercom station that can be used for calls to any other subscriber station. Master Stations are equipped with a full keypad.

HD Voice – The quality level of voice transmissions at an audio bandwidth of 7,000 Hz.

HTTP – Hypertext Transfer Protocol: a stateless protocol on the application layer that is used for transferring data over a computer network. It is used mainly for loading web pages from the World Wide Web into a web browser.

HTTPS – Hypertext Transfer Protocol Secure: a communication protocol that is used on the World Wide Web for secure (tap-proof) data transfer. It represents a form of transport encryption. HTTPS was developed by Netscape and introduced in their web browser together with SSL 1.0 in 1994.

Hypervisor – A computer program that provides the basis for running a virtual machine. Virtualised operating system instances are called “guest systems”.

Hyper-V – A hypervisor solution provided by Microsoft.

IEC 60118-4 – DIN EN IEC 60118-4:2018-08 – Electroacoustics – Hearing Aids – Part 4: Induction loop systems for hearing aid purposes – System performance requirements. This norm refers to audio frequency induction loop systems that generate an alternating magnetic field in the audible frequency spectrum to provide an input signal for induction loop hearing aids. The responsible committee for the DIN and VDE norms is DKE/GUK 821.6 “Hörgeräte und audiometrische Messtechnik” (Hearing Aids and Audiometric Measurement) of the DKE Deutsche Kommission Elektrotechnik Elektronik Informationstechnik.

IK Impact Protection Rating – In electronic engineering, the IK impact protection rating (also known as IK code or IK label) provides a measure of a component’s resistance against mechanical impacts and stress. In accordance with EN 50102 and EN 62262 (or internationally, IEC 62262), this rating specifies means of protection by enclosures for electrical equipment against external mechanical impact.

Intercom Server – The computing core of an Intercom system. It routes calls between subscriber units and uses interface cards to exchange data with external systems. Intercom Servers are based on a modular structure. This means the required functions are provided by plug-in subscriber cards and interface cards. All functions for the entire Intercom system are programmed individually. Interface – This enables data exchange with other systems (via data links to Intercom Servers and from Intercom Servers to third-party systems).

Intercom Terminal – Another name for “Intercom station”.

IoIP – Intercom over IP: a real-time protocol that is used for networking Intercom servers or enabling direct connection of Intercom terminals via IP networks. Thanks to the enhanced audio bandwidth of 16 kHz, the speech quality provided by IoIP is much higher than that of VoIP. In addition, IoIP guarantees ultimate operational reliability for real-time applications.

IP Ingress Protection Rating – Protection rating as per EN 60529 two numerals after “IP” indicate the level of protection against ingress of foreign bodies (especially dust) and water. For example, IP 65 is a common standard for Industrial Intercom Stations and outdoor applications.

IP – Internet Protocol: an asynchronous protocol for packet-switched data transfer over networks like the Internet (www – World Wide Web).

IPv6 – Internet Protocol Version 6 (formerly also known as “Next-Generation Internet Protocol”) is a method standardised by the Internet Engineering Task Force since 1998 for the transfer of data over packet-switched computer networks, especially the Internet.

IVC – Abbreviation for “Intelligent Volume Control”.

Communication Server – Another name for “Intercom Server”.

Converter – A device for converting data between two technically different transmission paths, e.g. from 2-wire to Ethernet.

LAN – Local Area Network: a network that is limited to a closed data transfer environment, typically within a building. An example would be a company network. Today LANs are usually implemented as Ethernet networks.

Control Desk – A command-and-control Intercom station that is also used for a variety of monitoring and control functions, e.g. displaying messages, switching output signals, etc. Control Desks are usually installed in control rooms, often in combination with a visualisation software that is run on a Control Desk PC.

Substation – A type of Intercom station that can only be called from a pre-defined selection of subscriber units within the Intercom system, typically to enable only call requests. Substations are usually equipped with only a single call button or a keypad with limited functionality.

Emergency call – A call that is given high priority (over other calls), usually initiated via an Emergency Call Station.

OpenDuplex – An technical innovation developed by Commend. OpenDuplex provides a touchless, natural conversation experience. A special process allows both parties to hear the other party at an enhanced volume level and speak with them at the same time in crystal-clear high-end audio quality to ensure optimum speech intelligibility.

PoE – Power over Ethernet: a method of providing power to networked devices via the 8-wire Ethernet cable.

Ring Group – A ring group consists of Intercom Devices or Intercom Clients on devices such as smartphones or computers. In the Symphony Cloud Platform, ring groups can be created to initiate calls, communicate with each other and operate door openers.

RTP – Real-Time Protocol: this protocol is used, for example, by SIP telephones. It provides a standard for transmitting digitised and encoded audio data as voice signal streams over the Internet.

Call request – A request for a call issued from an Intercom station. A call connection is established only if and when the call recipient accepts (i.e., answers) the call. At a Control Desk station multiple call requests can be displayed at the same time and handled as needed.

Simplex – A call mode where only one party can talk at a time and the call direction has to be switched manually by pushing a button, e.g. the “T” button (“Talk” button, ‘push-to-talk’).

SIP – Session Initiation Protocol: a text-based signalling protocol that is independent from the transmission of voice signals. In VoIP telephony, SIP is used exclusively to establish a connection. The server and the client (Intercom station) then exchange text messages to negotiate the conversation modalities, such as voice and video codecs and the transmission protocol. Once the call connection is established, the participating VoIP devices communicate directly with one another. When the call is ended, SIP is used for terminating the connection.

SIS – Software Intercom Server: a description of the software-based Commend VirtuOSIS.

Intercom Station – The user-operated devices of an Intercom system. They are equipped with displays to indicate the other party, as well as alarms and status details of integrated systems. Various models also provide keypads for dialling and for controlling other systems.

TCP/IP – Transmission Control Protocol/Internet Protocol: an IP-based protocol for secure data transfer, used e.g. for downloading data from the Internet or sending e-mails. Data packets are confirmed (via a handshake process), and the transfer is adjusted to the available data rate.

Subscriber – An interface of an Intercom Server used for the connection of a Intercom station.

Door call – A call request initiated at a Door Intercom Station.

uHD Voice – The quality level of voice transmissions at an audio bandwidth of 20,000 Hz.

Connection – A link established between Intercom servers, e.g. via Tieline (2-wire or 4-wire line connection), where not all functions are available on the linked Intercom servers. Each of the connected Intercom Servers must be programmed and maintained separately on-premise.

Networking – The interconnection of Intercom servers or Intercom systems across multiple sites, which behaves as a single system, i.e. all functions are available to all servers on the system. The overall Intercom system can be programmed and maintained via one of the Intercom Servers. Possible technologies for this purpose include HDSL via copper cabling, fib e-optic cabling or IP networks.

Visualisation – A software application that provides a visual overview of an installed system to enable fast and easy system interaction and incident response. Visualisation gives staff easy point-and-click access to all system devices, allowing them to stay in control of the entire audio and video communication network, even across multiple sites.

VoIP – Voice over IP: telephony via IP-based computer networks. In VoIP, typical telephone-specific information, including the voice signal and control details required for the connection, is transmitted over a data network.

vSphere – A Hypervisor-based solution by VMware.

WAN – Wide Area Network: Typically a global, multi-site network for interconnecting multiple sites. For example, the servers of a company’s individual LANs at its various offices can be networked into an overarching WAN.



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