COMMEND

INDUSTRIAL COMMUNICATION FOR EFFICIENCY AND SAFETY

Enhancing operational communication among work teams

MANUFACTURING
INDUSTRY

METAL INDUSTRY
AND MINING

OIL AND
GAS INDUSTRY

CHEMICAL
INDUSTRY

ENERGY AND
PUBLIC UTILITIES

CLEANROOMS

LOGISTICS
CENTRES

CLEAR, TARGETED AND EFFECTIVE

COMMUNICATION AND INDUSTRIAL PUBLIC ADDRESS

Our solutions are designed with three main goals in mind: to significantly improve our customers' operational communication, to boost their profit by enabling more efficient workflows, and to keep costs down by helping to prevent downtimes and keeping incident resolution times short.

EFFICIENCY & PRODUCTIVITY | OCCUPATIONAL SAFETY | ACCESS & SECURITY

In industrial companies and facilities employees must be able to rely on high-quality communication and PA, on reliable alarms in an emergency, and on video support and control systems – solutions that are designed to withstand even extreme environmental conditions. Obviously, it makes a big difference if a communication system is used in the chemical or pharmaceutical industry, in a production setting or in a logistics environment. Special challenges require special solutions.

industry.commend.com

PASSION FOR
SECURITY AND COMMUNICATION

1971
Founded in Austria

23
Subsidiaries & Partners worldwide

59+
Operating in more than 59 countries

200+
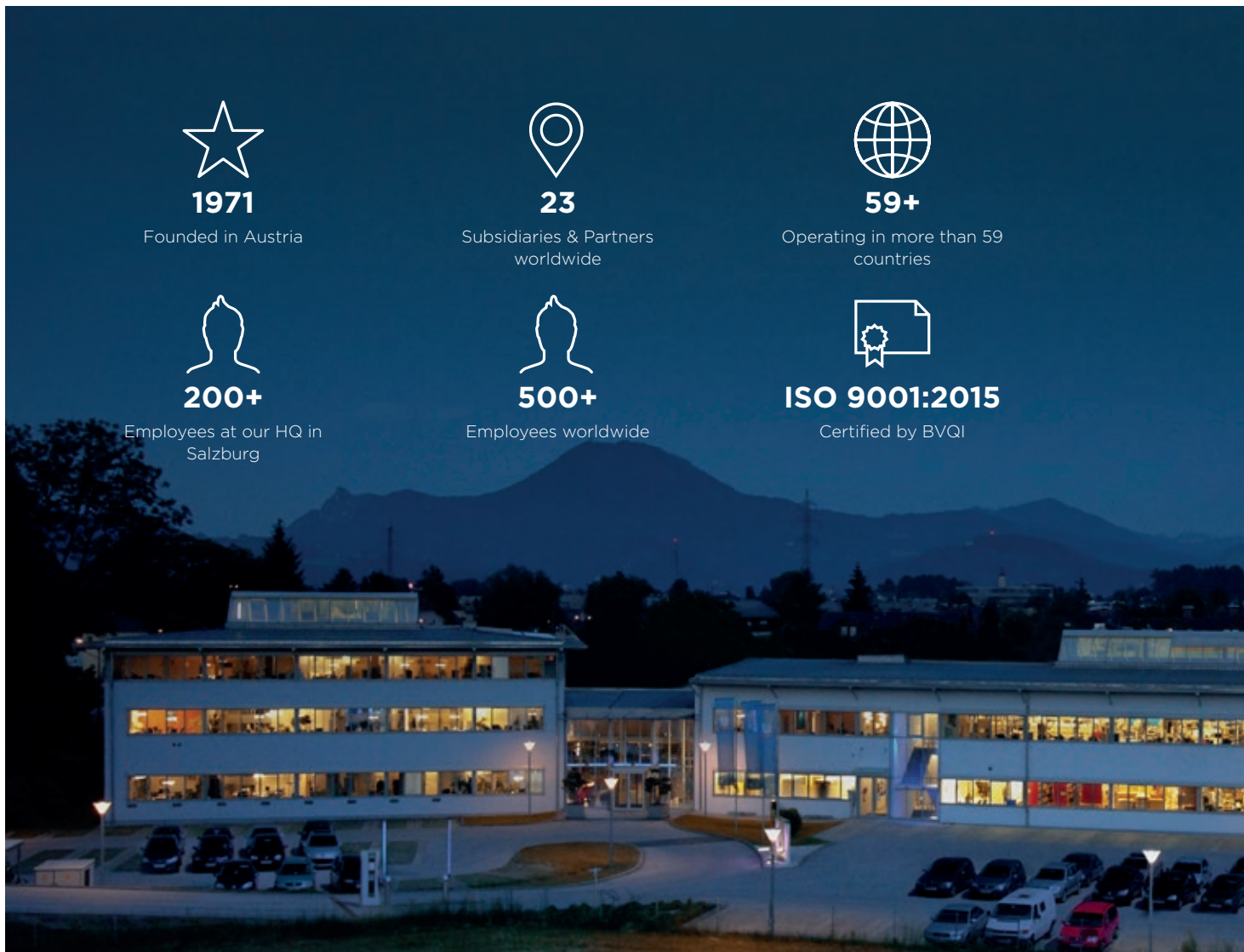Employees at our HQ in Salzburg

500+
Employees worldwide

ISO 9001:2015
Certified by BVQI

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 products with an excellent ROI thanks to their long lifecycle. Proven Commend Evergreen Engineering bridges product generation gaps. This means legacy components retain full functionality when used in combination with latest-generation systems. 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 makes their users prick up their ears.

EFFICIENT COMMUNICATION IS KEY WHEN IT COMES TO OPTIMISING PROFITABILITY WHILE HELPING AND PROTECTING PEOPLE IN THEIR DAY-TO-DAY ACTIVITIES.

When every second counts, people need technology that does not just work but that works 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, Commend solutions make sure not a single one is lost.

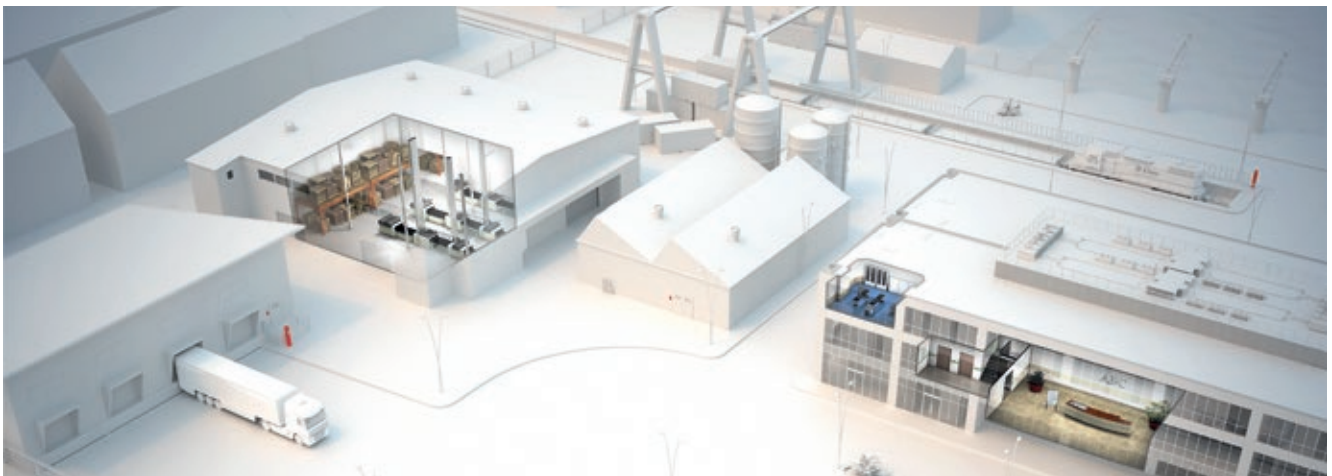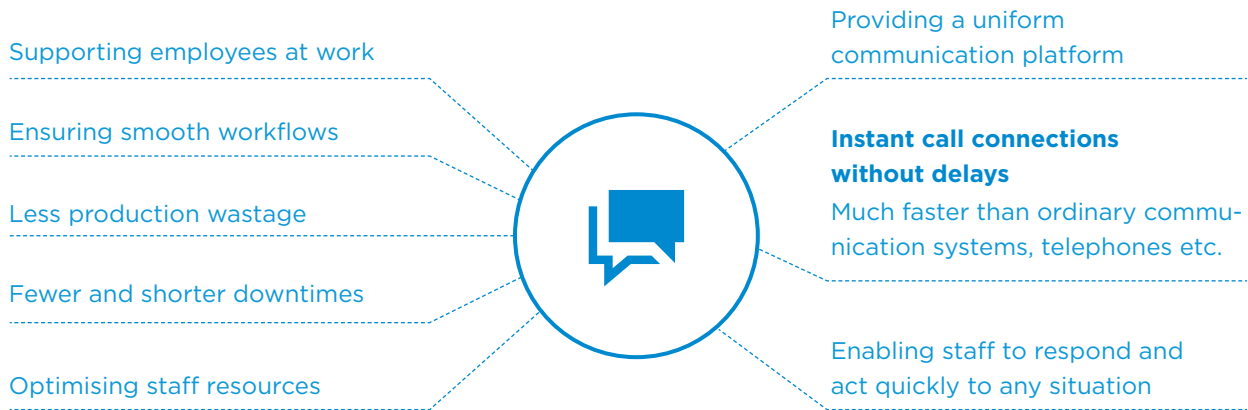## MORE THAN 45 YEARS OF EXPERIENCE

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.

AUSTRIA
OBS ESSIVE ABOUT QUAL ITY

OPTIMISED TEAM COMMUNICATION
BOOSTING EFFICIENCY AND PRODUCTIVITY

Clear, intelligible and ideally hands-free communication is essential in industrial environments. The ability to keep in touch with team members in remote locations or coordinate workflows on the fly is just as important. This saves valuable time. From Intercom stations and smartphone apps to loudspeakers, from integrated radio and telephony to optimised speech intelligibility through background noise suppression: Commend's communication solutions are designed specifically to simplify and speed up everyday workflows.

Supporting employees at work

Ensuring smooth workflows

Less production wastage

Fewer and shorter downtimes

Optimising staff resources

Providing a uniform communication platform

Instant call connections without delays
Much faster than ordinary communication systems, telephones etc.

Enabling staff to respond and act quickly to any situation

CONFERENCE CALLS

These provide a quick-fire way for team coordination along production lines, even on large industrial premises, to ensure more efficient collaboration. Call participants can be pre-defined or selected as needed, with the option of hands-free OpenDuplex® or Simplex connections.

PERFECT SPEECH QUALITY

Hands-free communication works perfectly even in extremely noisy environments. This is made possible by a well-balanced combination of background noise suppression, high sound pressure and automatic volume adjustment (IVC – Intelligent Volume Control).

INSTRUCTIONS DELIVERED

Public Address announcements can easily be targeted to individual persons, teams or the entire workforce to broadcast important information and instructions. Visual and acoustic signals urge employees to pay attention to the subsequent announcement.

FLEXIBLE CALL FORWARDING

Whenever the central control desk is unattended or unavailable, incoming calls are forwarded automatically in a pre-defined order of priority (Intercom stations, telephones, mobile devices). Calls can also be forwarded to multiple recipients simultaneously to ensure they are answered as quickly as possible.

PLATFORM WITHOUT LIMITS

Commend solutions integrate all means of communication into a consolidated hub platform. This allows you to use a stationary Intercom station to link up with a mobile radio network, connect to mobile devices or make announcements over the Public Address system. Integrating telephone systems is no problem either.

Industrial stations for Ex-Zones

Industrial stations

Cleanroom stations

Desktop-based and wall-mounted stations

Telephone systems, call forwarding to public telephone networks

Apps for mobile (Ex-)devices

Integration of mobile radio (DMR, TETRA, Analogue)

Stations for doors, gates and barriers

IP-based amplifiers and loudspeakers

Lift stations, Intercom modules for lifts and special constructions (integration into workspaces/machines)

ONE
Platform

Central overview and control

Emergency and Threat Response System (ETRS)

Access control and perimeter protection

Public Address, alarms, announcements, paging, etc.

Emergency call support for lift facilities

Integration of third-party systems (video, VMS, BMS, etc.)

Monitoring inputs, controlling outputs

Mobile communication

Communication for offices, warehouses, ...

Communication and emergency call support for industrial facilities

Interfaces and Technology Partners

NETWORKING
Systems of multiple sites can be networked and managed from a central location.

CONNECTION PERFECTION

Production areas in industrial environments should not be 'communication islands'. Commend solutions help to keep them connected to the 'outside world'. From the warehouse to the office, everyone is free to communicate and exchange essential information and instructions. There are many other ways that companies can benefit from Commend solutions as well.

Vehicular entry and exit gates

Reception areas and welcome points

Access control for security critical areas

Lift emergency call points that ensure compliance with legal requirements

and many more

MASTERFULLY RELIABLE IN THE ROUGHEST OF ENVIRONMENTS

EX 7000
Industrial environments with Ex-Zones

GAS
IIC
Highest Explosion Hazard Group

Zone 1	II 2G Ex db eb ib IIC T6 Gb
Zone 2	II 3G Ex db ec ic IIC T6 Gc

T6
Highest Temperature Class

DUST
IIIC
Highest Explosion Hazard Group

Zone 21	II 2D Ex tb ib IIIC T80°C Db
Zone 22	II 3D Ex tc ic IIIC T80°C Dc

T80°C
Highest Temperature Class

EE 7000 and EE 8000
Industrial environments without Ex-Zones

IP66
Fully protected even in extreme environments

IK10
Shock proof and highly durable

CERTIFIED FOR EX-ZONES

The "EX" line of Series 7000 has been developed with painstaking attention to the demanding requirements for hazardous and explosive environments. Of course the devices are internationally certified.

ATEX   IECEX   CNEX   EAC

VERSATILE

When it comes to communication, the requirements of the various branches of industry could not be more different. One industry may be focussed on mobility, while another needs stationary recipient terminals, and yet another may depend on communication management and recipient stations to enable easy-to-set-up conferences with multiple participants.

This is why the Series 7000 Intercom stations are designed to cover all possible scenarios while making the devices easy to operate, whether in regular industrial environments or particularly hazardous Ex-Zones.

AUDIO QUALITY FOR EFFICIENCY

Superior speech intelligibility even against loud background noise is essential for efficient processes and straightforward coordination among co-workers. This is where our highly efficient 20-Watt Class-D amplifiers come in. They provide the required volume capacity, hands-free OpenDuplex® connections and IVC (Intelligent Volume Control) for auto-adjusting the volume level to ambient acoustic conditions.

Further communication features such as Simplex-based PTT (Press-to-Talk), Paging/Party Line and Conference Call can be added as needed.

SERIES 7000 INTERCOM STATIONS

Durable double-walled construction made from high-performance polycarbonate

– Corrosion-proof .
– Low weight compared to other industrial heavy-duty stations, especially Ex-stations.
– Orange signal colour ensures easy visibility for optimum security.
– IP66, IK10.

Reliable, whatever the weather

Developed to withstand extreme ambient conditions.

Direct connection, power supply and control of flashing warning beacons

Additional connection options for monitoring inputs and controlling outputs (gate controls, etc.).

Absolutely watertight and dustproof microphone

Can be configured as a noise cancelling microphone.

Extra-high volume capacity up to 118 dB

Powerful enough to eliminate the need for external loudspeakers in most applications. Integrated loudspeaker and Class-D amplifier provide a sound pressure level of up to 118 dB/0.3 m (108 dB/1m).

Direct connection of separately placed loudspeakers

Dedicated powerful Class-D amplifier for optional external loudspeaker with up to 20 Watts output capacity for PA and paging.

Robust membrane keypads for heavy-duty industrial applications
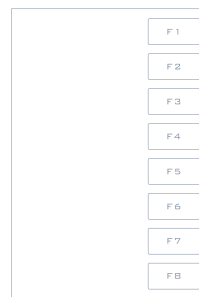
Large buttons ensure easy, reliable operation even when wearing protective gloves. What is more, the stations are easy to clean (resistant against chemical detergents) and mechanically hard-wearing.

Three keypad layouts

Full keypad / Party-Line Conference calls / Direct dialling

Version with loudspeaker

Version without loudspeaker

Version with handset

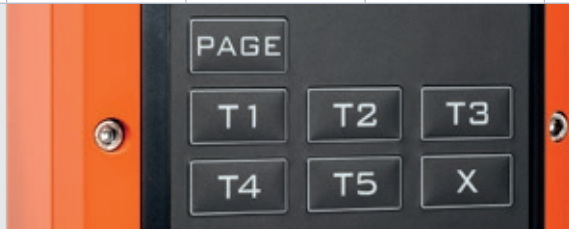**Industrial stations with full keypad and 4 function buttons**
**Series 7504**

Digital | IP66 | 16 kHz

with integrated loudspeaker		with handset		without loudspeaker		with handset	
100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC
⟨Ɛx⟩ **EX 7504D1 for Ex-Zone 1 and 21 classified industrial environments**							
EX 7504D1 AC S	EX 7504D1 DC S	EX 7504D1 AC S H	EX 7504D1 DC S H	EX 7504D1 AC	EX 7504D1 DC	EX 7504D1 AC H	EX 7504D1 DC H
⟨Ɛx⟩ **EX 7504D2 for Ex-Zone 2 and 22 classified industrial environments**							
EX 7504D2 AC S	EX 7504D2 DC S	EX 7504D2 AC S H	EX 7504D2 DC S H	EX 7504D2 AC	EX 7504D2 DC	EX 7504D2 AC H	EX 7504D2 DC H
EE 7504D for common industrial environments							
EE 7504D AC S	EE 7504D DC S	EE 7504D AC S H	EE 7504D DC S H	EE 7504D AC	EE 7504D DC	EE 7504D AC H	EE 7504D DC H

Series 7P04
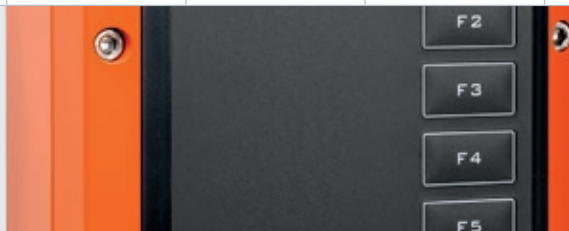**Industrial stations with party line keypad and 4 function buttons**

Digital | IP66 | 16 kHz

with integrated loudspeaker		with handset		without loudspeaker		with handset	
100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC
⟨Ɛx⟩ **EX 7P04D1 for Ex-Zone 1 and 21 classified industrial environments**							
EX 7P04D1 AC S	EX 7P04D1 DC S	EX 7P04D1 AC S H	EX 7P04D1 DC S H	EX 7P04D1 AC	EX 7P04D1 DC	EX 7P04D1 AC H	EX 7P04D1 DC H
⟨Ɛx⟩ **EX 7P04D2 for Ex-Zone 2 and 22 classified industrial environments**							
EX 7P04D2 AC S	EX 7P04D2 DC S	EX 7P04D2 AC S H	EX 7P04D2 DC S H	EX 7P04D2 AC	EX 7P04D2 DC	EX 7P04D2 AC H	EX 7P04D2 DC H
EE 7P04D for common industrial environments							
EE 7P04D AC S	EE 7P04D DC S	EE 7P04D AC S H	EE 7P04D DC S H	EE 7P04D AC	EE 7P04D DC	EE 7P04D AC H	EE 7P04D DC H

Series 7008
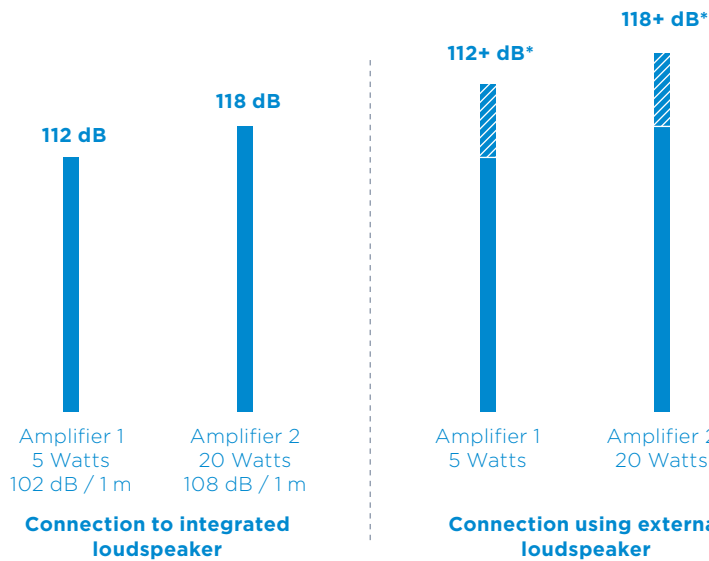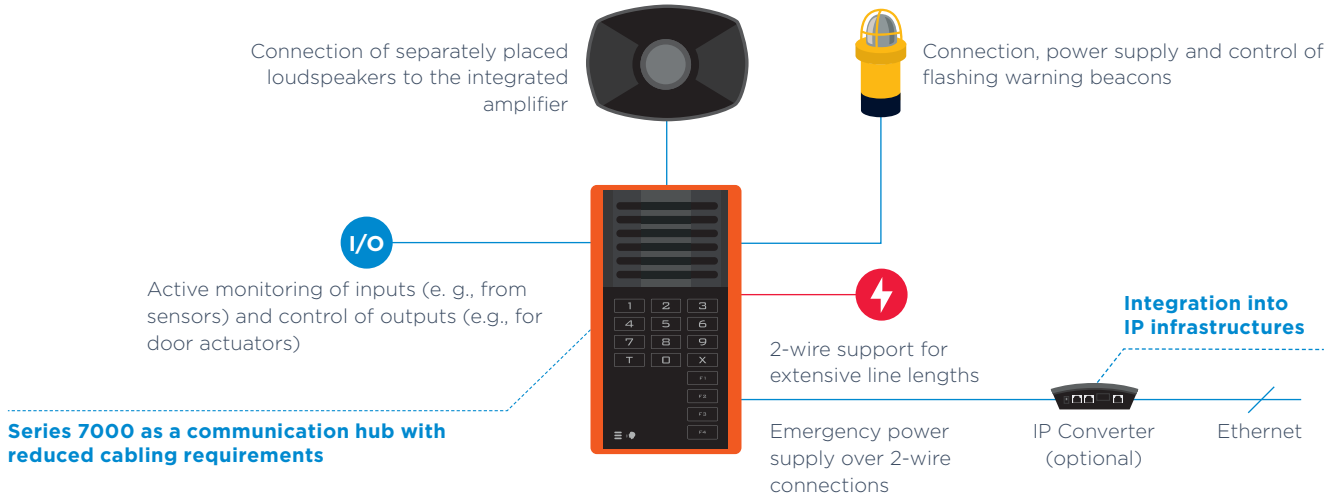**Industrial stations with 8 function buttons**

Digital | IP66 | 16 kHz

with integrated loudspeaker		with handset		without loudspeaker		with handset	
100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC	100 – 240 V AC	22 – 60 V DC / 18 – 30 V AC
⟨Ɛx⟩ **EX 7008D1 for Ex-Zone 1 and 21 classified industrial environments**							
EX 7008D1 AC S	EX 7008D1 DC S	EX 7008D1 AC S H	EX 7008D1 DC S H	EX 7008D1 AC	EX 7008D1 DC	EX 7008D1 AC H	EX 7008D1 DC H
⟨Ɛx⟩ **EX 7008D2 for Ex-Zone 2 and 22 classified industrial environments**							
EX 7008D2 AC S	EX 7008D2 DC S	EX 7008D2 AC S H	EX 7008D2 DC S H	EX 7008D2 AC	EX 7008D2 DC	EX 7008D2 AC H	EX 7008D2 DC H
EE 7008D for common industrial environments							
EE 7008D AC S	EE 7008D DC S	EE 7008D AC S H	EE 7008D DC S H	EE 7008D AC	EE 7008D DC	EE 7008D AC H	EE 7008D DC H

COST BENEFITS OVER THE ENTIRE PRODUCT LIFECYCLE

The stations are fast and easy to install and start up. Moreover, they double as a hub, which simplifies and minimises cabling requirements. Also, Series EX 7000 Intercom stations for Ex environments do not use expensive cable glands, which eliminates the need for cyclic technical inspections and maintenance. What is more, automatic self-monitoring of all functions and lines ensures permanent availability, making manual, time-consuming function checks unnecessary.

Connection of separately placed loudspeakers to the integrated amplifier

Connection, power supply and control of flashing warning beacons

I/O

Active monitoring of inputs (e. g., from sensors) and control of outputs (e.g., for door actuators)

Series 7000 as a communication hub with reduced cabling requirements

2-wire support for extensive line lengths

Emergency power supply over 2-wire connections

Integration into IP infrastructures

IP Converter (optional)

Ethernet

112 dB

118 dB

112+ dB*

118+ dB*

* Sound pressure depends on the loudspeaker model

Amplifier 1
5 Watts
102 dB / 1 m

Amplifier 2
20 Watts
108 dB / 1 m

Amplifier 1
5 Watts

Amplifier 2
20 Watts

Connection to integrated loudspeaker

Connection using external loudspeaker

INTERCOM STATIONS FOR INDUSTRY AND CHALLENGING ENVIRONMENTS

SERIES EE 7506HDCS
IP-INTERCOM STATIONS

Durable double-walled construction made from high-performance polycarbonate

– Corrosion-proof

– Low weight compared to other industrial heavy-duty stations, especially Ex-stations.

– Orange signal colour ensures easy visibility for optimum security.

– IP66, IK10

Redundant power supply

with Fall Back Mode

Monitor inputs (e.g. sensors) and control outputs (e.g. doors)

Excellent voice connection

with Intelligent Volume Control (IVC)

Extra-high volume capacity up to 118 dB

Powerful enough to eliminate the need for external loudspeakers in most applications. Integrated loudspeaker and Class-D amplifier provide a sound pressure level of up to 118 dB/0.3 m (108 dB/1m).

Direct connection of separately placed loudspeakers

Integrated Network Switch

Robust membrane keypads for heavy-duty industrial applications

Large buttons ensure easy, reliable operation even when wearing protective gloves. What is more, the stations are easy to clean (resistant against chemical detergents) and mechanically hard-wearing.

IP-Connectivity

Communication optional over IoIP or SIP

– **Option 1 - cloud:** Connection to Symphony Cloud Service

– **Option 2 - on prime:** Connection to an Intercom Server such as S3 and S6

– **Option 3 - mesh:** IP-Intercom stations build their own communication network without server

FLASHING LIGHTS

CWB-ATEX FLASHING LIGHT

– Ex classification: 2G (Zones 1 and 2), 2D (Zones 21 and 22).

– Housing made of aluminium, therefore usable in all chemical and petrochemical plants as well as offshore plants, IP 66.

– Protection system and stable mechanical construction allow use under toughest operating conditions incl. GL approval.

– Ex „de" for fast and safe installations.

– Up to 5 Joule of flash energy, -40°C to +50°C.

– Various mounting brackets and a protective cage are available as accessories.

PYRA 10 JOULE FLASHING LIGHT
PY X-M-10

– Energy-saving design with maximum signalling range, thanks to Xenon technology.

– IP66 rated, with IK08 rated, shock-proof casing.

– Installation is via exterior mounting tabs and interior mounting holes.

– 4 different flashing frequencies selectable via DIP switch.

– When used in arrays of more than one, these lights can also be synchronised.

QUADRO F12 FLASHING LIGHTS
QUADRO F12 -3G | QUADRO F12 | QUADRO S

– Mounted via concealed interior holes or external lugs; fast, flexible and secure.

– Outstanding mechanical strength with IP 66, IP 67 and IK08.

– Whether in the open air, in a hailstorm or when high pressure cleaning systems are used, the Quadro stays sealed and signals reliably.

Quadro F12 -3G (EX Version) - 7,5 Joule

– Economic visual signaling device for EX-zone 2 and 22(3G/3D-Version) , -20°C to +45°C.

Quadro F12 (non EX Version) - 13 Joule

– IP66 & IP67 rated; IK08 rated, shock proof casing -40°C to +55°C .

Quadro S – 13 Joule

– Automatically synchronized flashing light, up to ten of these lights can be operated synchronously.

PYRA KOMPAKT 5 JOULE FLASHING LIGHT
PY X-S-05

– This flashing light comes in a compact design. It is suitable for many different applications and is particularly easy to mount securely into place.

– IP66 rated, with IK08 rated, shock proof casing.

– Installation is via exterior mounting tabs and interior mounting holes.

– Easy-to-connect power supply in casing base.
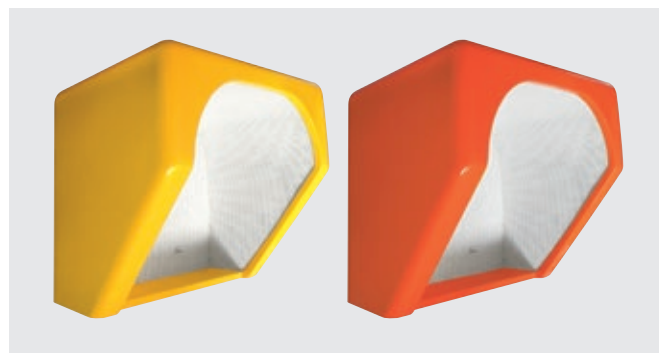
– Shock-proof dome design.

ACOUSTIC HOODS

ACOUSTIC HOODS

Durable, weatherproof high-quality acoustic hoods

– Reduces noise by up to 23 dB

– Made from fibre-reinforced polycarbonate (FRP)

– Colours: yellow and orange

– Fire-resistant as per BS476 Part 7 Class 1

PROVEN, HIGHLY DURABLE DESIGN

The Series EE 8000 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. This way, they help to improve works safety and enable well-coordinated workflows in a variety of industrial environments.

Wherever absolute reliability, ease of use and ultimate availability are required, Series 8000 stations really come into their own. Their extremely durable hardware is complemented by a flexible application-specific software. Its flexible functions are designed to accommodate individual needs as well as local legal requirements and regulations.

Series EE 8000 products have proven highly successful in countless project installations around the world. Applications range from industrial environments such as metal-working and mining, manufacturing, oil and gas production and the chemical industry to power plants and public utilities, valued for their many benefits, the Series 8000 Intercom stations have also found their way into environments such as waterways, road tunnels and motorways.

PROVEN, HIGHLY DURABLE DESIGN

SERIES 8000 INTERCOM STATIONS

Durable double-walled construction made from high-performance polycarbonate

– IP66
– Corrosion-proof
– Orange signal colour ensures easy visibility for optimum security

Reliable, whatever the weather

Developed to withstand extreme ambient temperatures

Flexible connection options
for a handset, flashing warning beacons and separately placed loudspeakers; additional ports for monitoring inputs and controlling outputs (gate controls, etc.)

Absolutely watertight and dustproof microphone

The microphone's sensitivity can be adjusted to local conditions to ensure ultimate speech intelligibility. This way, the microphone can be adjusted to different talking distances.

Extra-high volume capacity up to 118 dB

Powerful enough to eliminate the need for external loudspeakers in most applications. Integrated loudspeaker and 25 W Class-D amplifier provide a sound pressure level of up to 118 dB/0.3 m (108 dB/1m).

Easy to operate and custom configurable

Large industrial-sized, IP67 rated push-buttons provide fast, reliable access to all essential functions.

LED buttons can be used for status indication, e.g., Active/Busy, system events, etc.

The buttons can be custom programmed to suit individual needs. For example, they can be used for initiating (direct-dial) calls, broadcasting announcements or bringing up Intercom functions (controls, actions, etc.).

Technical Details

Digital 2-wire cabling supports extensive line lengths

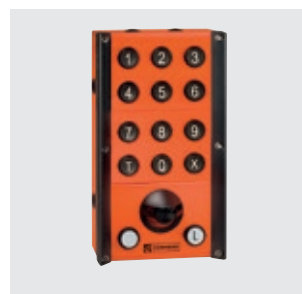Power supply 24–42 VAC/40 VA or 22–60 VDC/40 W

SOME OF THE MANY POSSIBLE COMBINATIONS

EE 8158M | 8 LED keys

**EE 81C8M** | 2 LED keys and HD video camera

EE 8238M | full keypad and two LED keys; without loudspeaker

EE 81ADMSOS | 1 LED key and 1 emergency call button; SOS labelling

MODULAR CONCEPT FOR INDIVIDUAL COMBINATIONS

Based in a modular building-block system, the device enables a variety of different combinations. This allows the Intercom station to be custom tailored to the specific communication requirements in different areas. A basic housing can easily be combined with one or two additional expansion housings. This way, it is possible to compile Intercom stations with up to 50 freely programmable keys. For further combination options and technical details please refer to the data sheet.
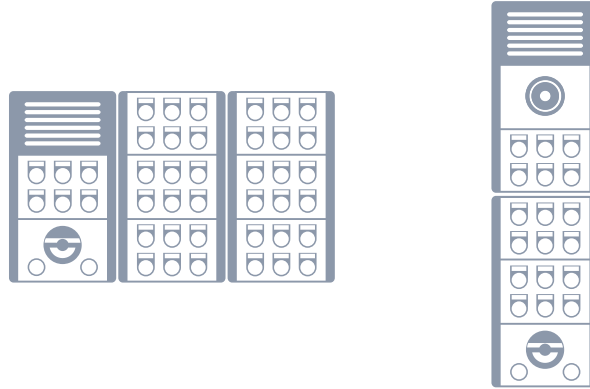
HOUSING

Basic housing
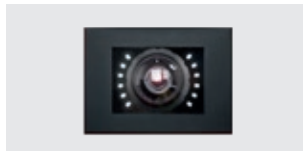**EE 8999M**

Basic housing with "SOS" label text
EE 8999MSOS

Expansion housing
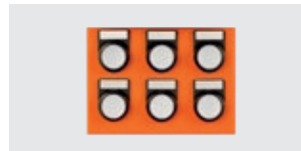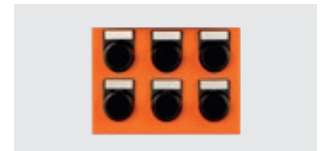**EE 8999S**

MODULES
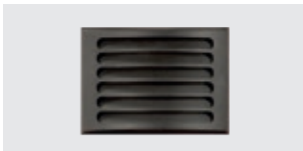
Loudspeaker Module
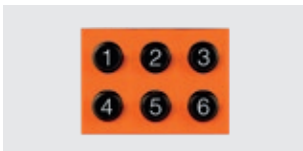**EM 650** | 15 W output power; sound pressure 96 dB/1 m

Camera Module
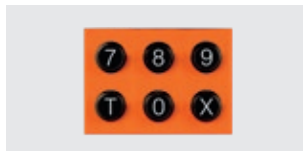**EM 6CA** | HD video camera and LED illumination

LED Keypad Module
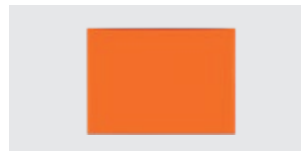**EM 605** | Status indicating LEDs; replaceable label fields

Keypad Module
EM 606 | Replaceable label fields
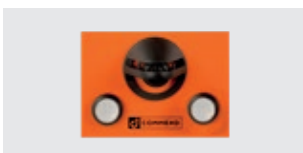
Keypad Module 1-6
EM 602

Keypad Module 7–X
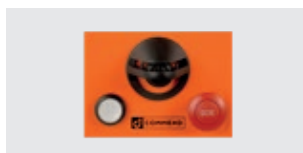**EM 603**

Dummy Module
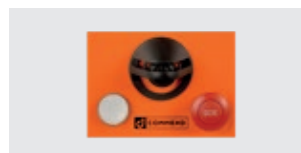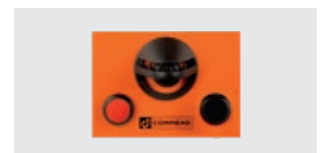**EM 600**

Dummy Module SOS
EM 6A0

Microphone Module
EM 680 | 2 buttons; status indicating LEDs

Microphone Module
EM 681 | 1 button and 1 emergency call button; status indicating LED

Microphone Module
EM 6B0 | 1 emergency call button; 1 status indicating LED

Microphone Module
EM 660 | 2 buttons
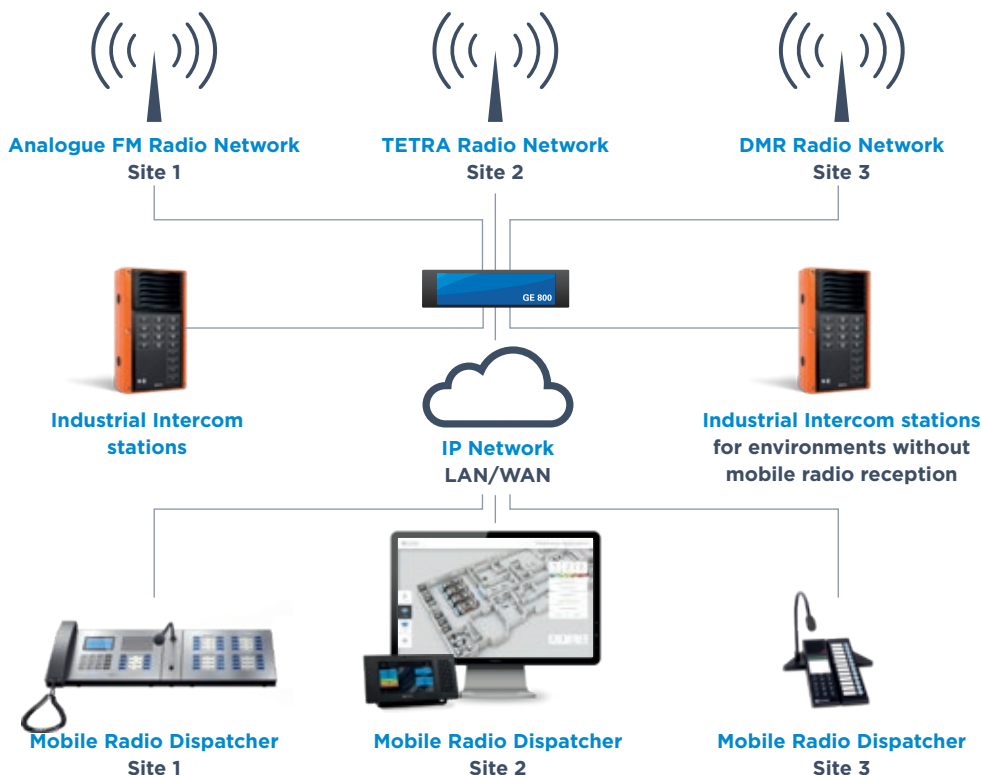
INTEGRATED MOBILE RADIO

MULTI-SITE COMMUNICATION ACROSS DIFFERENT PLATFORMS

Commend provides the unique ability to connect mobile radio and Intercom stations across multiple sites and technologies. This way, the Commend solution does away with the limitations of mobile radio and makes it a part of the overall communication platform. As a result, employees with stationary Intercom stations can always reach colleagues who are 'on the go' (and vice-versa) via mobile radio. This makes coordination among co-workers easier, more flexible and more efficient.

Calls to and from Intercom stations

Support for DMR, TETRA and Analogue-FM radio standards

Calls to subscribers in remote radio networks

INTERCOM STATIONS AS MOBILE RADIO DISPATCHERS

The Intercom stations in control rooms can double as radio dispatcher units, which saves the cost of a separate radio communication system. However, cost saving is only one of many benefits, as the Commend platform and its networking capabilities open up a wide spectrum of solutions that would not be possible with classic mobile radio. Commend platform users can even make calls to remote mobile radio networks. What is more, all calls can be recorded if required. Especially in case of an emergency this feature can be helpful for evidence and evaluation purposes.

Analogue FM Radio Network
Site 1

TETRA Radio Network
Site 2

DMR Radio Network
Site 3

GE 800

Industrial Intercom stations

IP Network
LAN/WAN

Industrial Intercom stations for environments without mobile radio reception

Mobile Radio Dispatcher
Site 1

Mobile Radio Dispatcher
Site 2

Mobile Radio Dispatcher
Site 3

COMMUNICATION FOR STERILE AREAS

The security and cleanroom standards in the laboratories and production facilities of the pharmaceutical, semiconductor and food industries are extremely high and subject to stringent technical requirements. While this is understandable, it also makes on-site communication difficult. Commend develops technically advanced communication solutions that integrate seamlessly into these challenging work enironments and help to boost efficiency while improving occupational safety.

PHARMACEUTICAL AND SEMICONDUCTOR INDUSTRY

By nature, cleanrooms are rather isolated areas. Here Commend solutions helps staff to stay connected the 'outside world'. They integrate with existing PA and telephone systems to provide seamless connections to all other areas. In case of an incident, this enables instant reaction, information and evacuation as necessary.

FOOD PRODUCTION

To allow employees to exchange information hands-free and efficiently across the production lines, stations are installed in fixed strategic locations throughout the premises to be within easy reach for all workers. This, together with hands-free support, enables a significant increase in work efficiency.

Designed in accordance with EN ISO 14644-1 Class 1–9

Hygienic design in accordance with the GMP objectives.

Closed-sealed membrane surface

IP66 protection rating.

Version conforming to IEC 60601-1 (2nd Edition) with anti-bacterial sealing membrane.

Surfaces are designed to withstand strong cleaning fluids.

A specially developed, imprinted loudspeaker surface enables perfect speech quality despite the device being fully sealed.

Hands-free communication

This allows users to keep working while they are speaking.

Always available

Automatic function monitoring for all system components (loudspeakers, microphones, lines, etc.)

Flush-mounted into a wall receptacle

Integrated into a wall surface

Mounted onto a wall surface

SERIES WS 800P INTERCOM STATIONS

Robust and compact Intercom station for industrial environments. The large and resistant buttons ensure easy, reliable operation even when wearing protective gloves. In addition to basic communication, the Intercom stations enable the control of other systems. The integrated amplifier provides the necessary volume in areas with high background noise.

Connectivity

Communication over IP (IoIP or SIP) or 2-wire digital.

Hands-free communication

This allows users to keep working while they are speaking.

From frost to heat

Designed for a temperature range of -20 up to +70°C.

Connectivity options for remote loudspeakers

The devices can be enhanced with an additional and internal amplifier and also external loudspeakers can be connected.

Loudspeaker extension modules of Series WS can be easily connected.

Resistant polycarbonate construction

IP 66 rated

Sound pressure level max. 99 dB

Signal colour orange

visible from a distance.

RAL 2004

A WIDE RANGE OF POSSIBILITIES

WS 810P | TFT display, Full keypad

WS 800P | LCD display, Full keypad

WS 200P | 3 call buttons

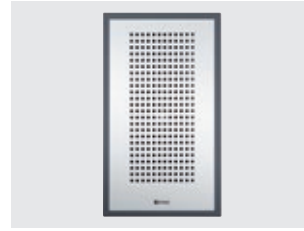**WS 200P CM** | Video camera, 3 call buttons

MODULE

Surface Mount Kit

WSSH 50P

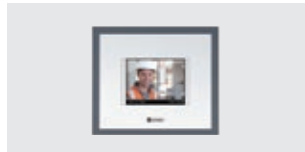**Flush Mount Kit**

WSFB 50P

Loudspeaker Module

WSLM 56P | 6 loudspeakers for use in very high-noise environments
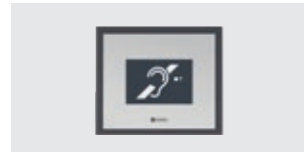

Handset Module

WSHS 50P-JST | with integral „Push to Talk" button

Camera Module

WSCM 50P | IP network camera

Display Module

WSTM 50P | TFT Display Module

Audio Induction Loop Amplifier Module

WSIL 50P | transmitting Intercom audio signals to hearing aids

Loudspeaker Module

WSLM 52P | 2 loudspeakers for use in high-noise environments

PROTECTION AGAINST MALICIOUS DAMAGE

The front plate, made from high grade steel, with poke protection and special screws, provides protection against vandalism. The robust construction also protects against water jets, dirt and dust.

Vandalism-resistant IK07

Hands-free communication with high volume capacity

Poke protection and special screws

WS 800V | LCD display, Full keypad

WS 210V | Emergency call station with call buttons

WSSH 50V OR EM | Surface Mount Kit, orange (RAL 2004)

WSDD 59V | Direct Dialling Button Module

MAKING WORK AREAS SAFER

Intercom systems by Commend help to improve occupational safety. It all starts with clear, easily intelligible communication that prevents misunderstandings and helps to avoid accidents. In case of an emergency, users can call for help quickly and easily using the nearest Intercom station or a mobile device. This helps to ensure the safety of working staff with Commend's proven high speech quality, which enables perfect intelligibility even in extremely noisy environments.

It is said that "seeing is believing". Visualisation-based Commend solutions with floor plans and video displays help staff to stay on top of things, allowing them to quickly trace the source of alarm calls and prevent false alarms. Connections to internal as well as external help and rescue forces can be set up at a moment's notice. After all, there is a lot at stake in an emergency, as any (further) mistake might have fatal consequences.
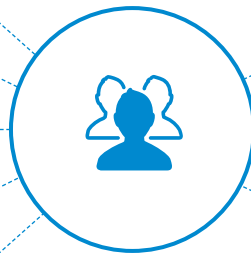
Avoiding accidents through enhanced communication

A reassuring feeling for employees

Fewer and shorter downtimes

Responding to emergencies quickly and correctly

Lessening the negative effects of accidents

Clear instructions, clear communication

Emergency and Danger Response System (EDRS)

EMERGENCY DANGER RESPONSE SYSTEM (EDRS)

INSTANT REACTION IN EMERGENCIES

Disruptions or emergencies, as well as incidents ranging from harmless to life-threatening – in industrial environments, there is danger lurking everywhere. Whether it's caused by human error or a technical fault, an emergency call for instant, professional help, as every second counts. Communication systems by Commend raise alarms and provide instant overviews of ongoing situations. They initiate crucial processes, support supervisors and establish communication connections to internal and external support and rescue services.

PREVENTION

Clear, simple and easily intelligible communication prevents misunderstandings and helps to avoid accidents.

ALARMS

Time-saving communication

Making an emergency call is quick and easy with Intercom stations, push-buttons or mobile devices, either manually or automatically (e.g., via sensors).

VERIFICATION

Reacting quickly

Control Room operators can keep an eye on things, thanks to on-screen visualisations and video displays.

Alarms can be verified via voice communication to eliminate costly false alarms.

REACTION / DE-ESCALATION

Reacting properly

Instant connections to internal and external intervention and rescue services enable the exchange of essential information.

ACTION SEQUENCE

Situation-specific

If required, the system can perform a series of automatic actions in a pre-defined sequence.

Announcements can be broadcast using pre-recorded messages and targeted to specific PA zones (if required, with different messages for individual zones)

Activation of visual and acoustic alarms

Control of subsections such as doors, barrier gates or lighting

ACTION PLAN

Stress relief

Depending on the situation, the solution supports control centre staff in following action plans. This helps control desk operators to take the required measures while keeping stress and time pressure at manageable levels.

AFTERCARE AND PREVENTION

ANALYSIS AND EVALUATION OF EXISTING ACTION CONCEPTS

The Commend system can create a seamless log documenting each event. If required, calls can be recorded along with the corresponding video stream. This enables a detailed analysis and an impartial review of the events. The system provides instant details about what has happened, who responded and how fast. Based on this information, existing reaction plans can be evaluated and revised to include preventive measures for the future.

ASSISTANTS FOR OVERVIEW AND CONTROL

The control desk is the first point of contact – the hub where all lines converge. It is the main point of coordination, monitoring and supervision. Fortunately, supervising staff at the control desk won't have to rely on their ears alone. They have Commend's visualisation-based solutions at hand, which provide on-screen floor plans and video displays to help them assess the situation quickly and accurately. In case of an emergency help call, the Commend Emergency Danger Response System is standing by to assist staff in taking the necessary steps. If required, they can do so by following a pre-set action plan, which allows a series of actions to be performed automatically.
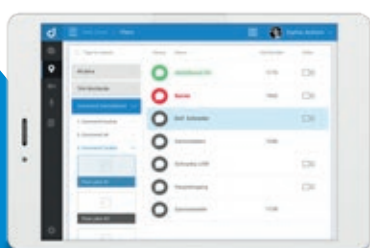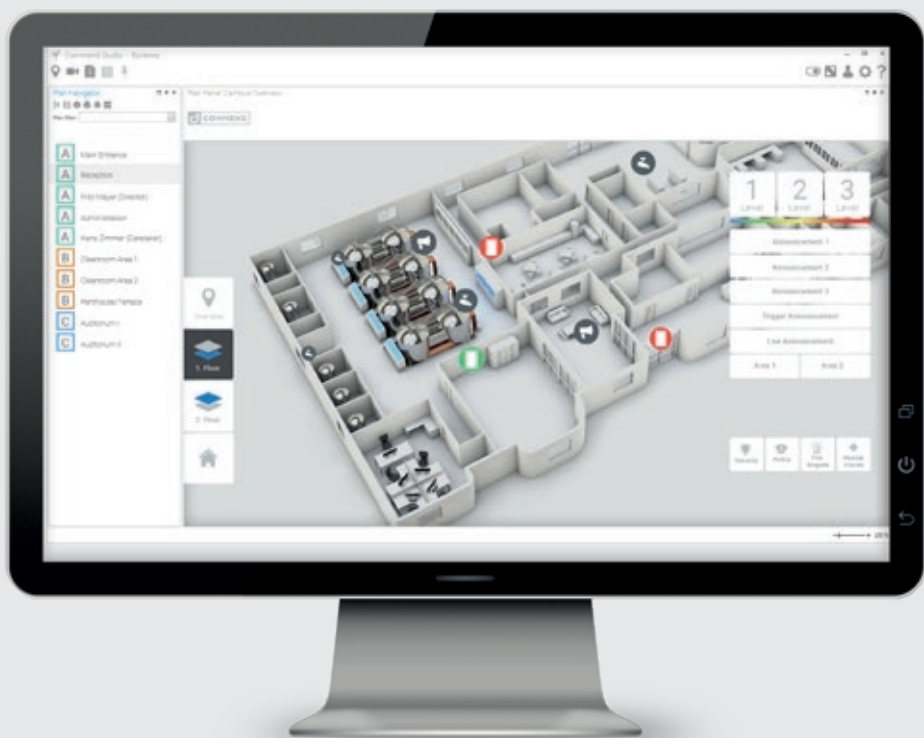
MOBILE CONTROL DESK

Thanks to the Studio Web Client, there is no need to install software locally. All the required data can be accessed in a flash using just a notebook or tablet with a browser.

STUDIO

Studio is a powerful family of software modules for professional control desk management. All control desk functions are displayed on one or more monitors. Interactive icons (on-screen symbols) represent calls and error or alarm messages; they change colour depending on their level of urgency. Additional windows provide other essential details, such as action plans or help texts. Customisable status windows provide operators with an instant overview of the entire ComWIN system along with relevant details.
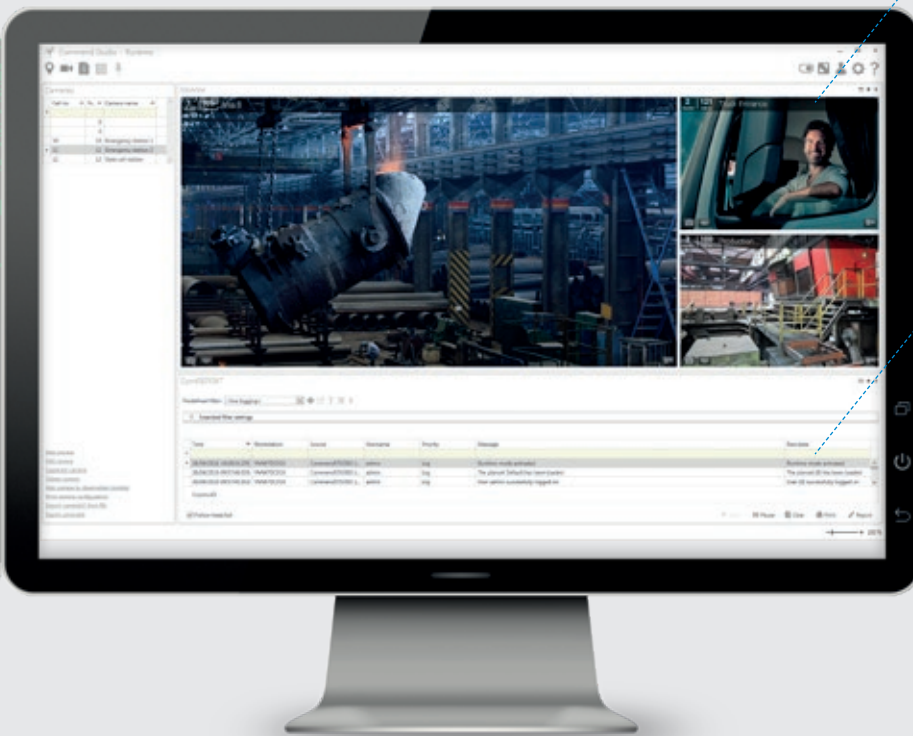
Video

Single or multiple video sources can be brought on screen automatically to complement voice calls.

Logging and evaluation

All system events are logged seamlessly for further processing and evaluation. Reports can be scheduled to be e-mailed automatically to pre-defined recipients.

Visualisation
ComWIN

Video integration
ComVIDEO

Logging
ComREPORT

Audio recording
ComREC

Time-scheduled planning and control
ComSCHEDULE

CONTROL DESK
DUETTO

This control desk station supports users in handling calls, putting all relevant functions at their fingertips. Incoming voice calls are complemented by live video and CCTV images.

Smart and compact

Touch screen for fast access to features and functions (making calls or PA announcements, or controlling equipment) Optional add-ons: Integrated video camera; handset

Customisable user interface

Using the web interface you can arrange and adjust the user interface to support you in your everyday work. Configure your own GUI layout, place direct dialling buttons where you need them, and keep all your frequently used functions at your fingertips. Best of all, you are not limited to a single page, as you can extend your personal interface layout to several navigation levels.

Control desk EE 380

Modular design – the Intercom base unit can be enhanced with an add-on gooseneck microphone, handset, extra loudspeaker add-on and up to four direct dialling modules.

Direct dialling modules with multi-functional LEDs for status indication

Control desk EE 900

Compact design, with connection ports for a headset; optionally available with a handset.

Version with gooseneck microphone

CONTROL DESK
CONDUCTOR

Thanks to its modular design, the CONDUCTOR can be custom tailored to a wide range of individual user requirements. A special highlight are the brilliant 16 kHz speech quality and extra high volume capacity. Everything is designed to allow users to keep even complex Intercom infrastructures and integrated external systems under easy, fast and reliable central control.

All control desks can be used as mobile radio dispatchers for mobile radio networks.

Modular design

The Intercom base unit can be enhanced with an add-on gooseneck microphone, handset and up to three direct dialling modules.

Direct dialling modules status indication

Direct dialling buttons for instant access to call recipients or PA functions (live announcement, pre-recorded message, zone selection, etc.); includes multi-functional LEDs for status indication.

MOBILE SOLUTIONS
KEEPING IN TOUCH WITH TEAM MEMBERS

Intercom Client
Android

Calls to Intercom stations
Keypad for number dialling or for use as direct dialling buttons

Instant direct connections to internal or external emergency and rescue services
via direct dialling buttons

Calls to mobile and landline networks

Conferences
Joining or setting up conference calls is a breeze.

Live announcements
via PA system, including zone selection

Announcements based on pre-recorded voice messages

Subsection control
Outputs enable the control of external equipment such as door actuators.

UNIFIED PA

ONE PLATFORM FOR A MULTITUDE OF POSSIBILITIES

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 efficiency for users in their everyday work. For example, any Intercom station can be used to make a Public Address announcement. At the same time, the unified platform makes sure that recipients can respond instantly to announcements by calling back via any Intercom station or even via a two-way loudspeaker.

Our solutions are used in buildings, industrial facilities and public infrastructures from public transport to Smart Cities to ensure uncompromising safety and efficiency.

BASED ON ADVANCED NETWORKED IP TECHNOLOGY

to enable ultimate flexibility and scalability

COMPATIBILITY WITH OTHER SYSTEMS

helps to keep operating costs down while enabling integrated overall solutions.

SETTING NEW STANDARDS FOR PUBLIC ADDRESS SOLUTIONS

with complementary two-way communication and programmable logic control functions.

FROM SERVERLESS SOLUTIONS TO VIRTUAL SERVER ENVIRONMENTS

for attractively priced and purpose-built solutions, whether decentralised or centralised.

FULL SYSTEM SELF-MONITORING

Everything a modern security solution needs – IT security included.

PERFORMANCE AND ENERGY EFFICIENCY AT ITS BEST

thanks to systems that require only few components and support decentralised concepts while leveraging latest Class-D amplifier technology.

Announcements are broadcast via Intercom stations, with the option to make an immediate response call.

Each individual Intercom station can be used to initiate a PA announcement.

Intercom Apps for announcements and remote control of equipment.

PA announcements can be initiated from any Telephone.

Audio Management

Flexible zone definitions

Live and pre-recorded announcements

Scheduled or event-triggered announcements

Custom combination of pre-recorded announcements

Loudspeakers come with direct network connection and the ability to adjust their volume dynamically to ambient acoustic conditions.

Powerful networked IP-based amplifiers with 70/100 V loudspeakers.

unified PA

Integration and interfaces to other systems (VMS, admission control, etc.).

Networking of multiple sites enables decentralised solutions. Commend Industrial Intercom: the unified platform for reaching any and all recipients anywhere, any time.

Commend Studio

for visual Audio Management

THE REASONS WHY EQUIPMENT CONTROLS ARE AN ESSENTIAL COMMEND FEATURE – AND WHY THIS DOUBLE FUNCTION IS UNIQUE

Attention! Incident at …

Attention! Incident at …
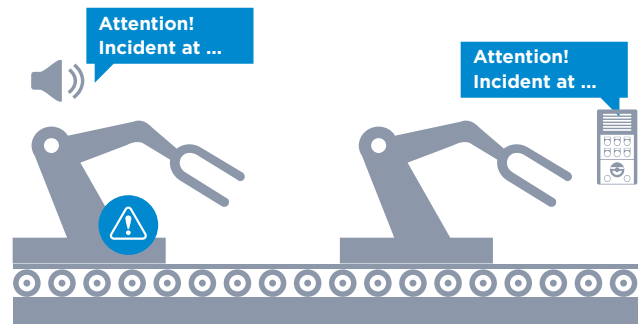
Public Address + Intercom + Interfaces = Solutions
By linking systems you can boost efficiency and cut costs along the way. Eliminating the need for manual step-by-step processes reduces both costs and staff resources. Interfaces allow Commend solutions to be used for interacting with other systems, from simple door actuators to sophisticated video management systems. This includes Commend PA components, which can be combined with a wide range of other equipment such as external machinery.

A special bonus: unique logic-based action sequences
Flexibility helps to meet individual customer requirements. In addition to improving efficiency, these options also provide creative possibilities for useful functions and processes. For example, a specific machine status (e.g., start-up or error) can be set to trigger the automatic playback of a pre-recorded announcement.

1. Possible trigger sources include **production equipment, subsections**, alarms, VMS, sensors, etc.
2. Playback of pre-recorded messages or acoustic warning signals
3. Combinable functions and action sequences, e.g., 'Turn light on' + 'Open door'
4. Automatically triggered calls to the control desk
… and many other functions.

IP AMPLIFIERS
AF SERIES

SCALABLE FROM DECENTRALISED TO CENTRALISED SOLUTIONS

A high performance level and a selection of different audio outputs are among the main characteristics of Series AF amplifiers. They are designed for universal use in applications up to complex PA and Intercom solutions. All models come in a compact housing and provide different installation options in addition to an efficient design and high performance. This makes them suitable for a wide variety of applications. With a flexible design like that, the devices also keep expenses low in terms of cabling and energy requirements. What is more, they integrate easily into networks and offer numerous security functions, such as loudspeaker-to-line monitoring and self-monitoring of their audio functions. As a result, Series AF amplifiers make PA not just secure, but highly efficient.

The upward compatibility of the AF Amplifier Series is just as unique as its functional versatility. New functions can be downloaded easily via software updates.

125 – 250 – 500 Watt IP Amplifiers

AF 125H – AF 250H – AF 500H | Hybrid IP (IoIP/SIP), Class-D amplifier, robust metal housing for 19"-Racks (1U)

70 V / 100 V loudspeaker output

Loudspeaker-to-line self-monitoring (requires license)

Supports N+1 functionality
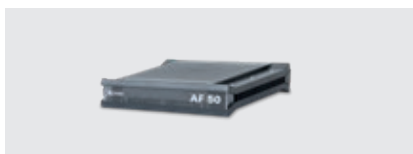
50 Watt IP Amplifiers

AF 50H | Hybrid IP (IoIP/SIP), Class-D amplifier, suitable for installation in 19"-Racks or wall-mounting

70V / 100V / 8 Ohm loudspeaker output

Loudspeaker-to-line self-monitoring (requires license)

20 Watt IP Amplifiers

AF 20H | Hybrid IP (IoIP/SIP), Class-D amplifier, suitable for wall-mounting or installation on a DIN rail bracket

4 / 8 Ohm loudspeaker output

THE EASY WAY TO BRING EXISTING PA SYSTEMS UP TO DATE AND EVEN NETWORK THEM

Need a power boost or technology update for your PA system? No problem – simply replace the existing amplifiers and central units by Commend IP amplifiers. Job done. Existing wiring and loudspeakers can be reused to keep modernisation costs down. The upgraded system provides the full range of Commend functions. If required, multiple systems can be networked via the IP Amplifiers. It is also possible to integrate IP loudspeakers, taking full advantage of all features and functions from the Commend world.

HOW TELEPHONES CAN INTEGRATE WITH PA SOLUTIONS

Commend IP Amplifiers come with IoIP (Intercom over IP) and SIP capabilities, which allows them to integrate easily and seamlessly with existing VoIP/SIP-PBX systems as needed. This enables PA broadcasts via SIP telephones and provides the option of adding PA to existing SIP-PBX systems. The concept even supports serverless solutions that consist only of SIP telephones and Commend IP Amplifiers or Commend IP loudspeakers.

LOUDSPEAKERS

HP-15(T)

15 W pressure chamber loudspeaker, max. SPL 108 dB, IP66/67

DSP-15L(T)

25 W pressure chamber loudspeaker, max. SPL 110 dB, IP66/67

DS(T)-100 / DH-50

100 W alarm loudspeaker, max. SPL 112 dB (with upgrade kit up to 134 dB sound pressure), IP67

BP-660(T) A+B

Two separate loudspeakers in one, for A+B System, max. SPL 93 dB

LOUDSPEAKERS FOR EX ENVIRONMENTS

DSP-15EExmN(T)

15 W pressure chamber loudspeaker for Ex-Zone 1,2/21,22, max. SPL 106 dB, IP66/67

DSP-15EExmNL(T)

25 W pressure chamber loudspeaker for Ex-Zone 1,2/21,22, max. SPL 109 dB, IP66/67

HP-20EExIIN(T)

20 W pressure chamber loudspeaker for Ex-Zone 2/22, max. SPL 110 dB, IP67

CAREEX-6(T)x2

Bidirectional Ex loudspeaker, max. SPL 81 dB, IP67 (e-chamber)

LOUDSPEAKERS FOR CLEANROOMS

CR-6T

6 W cleanroom loudspeaker, max. SPL 85 dB, IP67

CAP-15 WCR(T)

15 W cleanroom sound projector, max. SPL 85 dB, IP 55

BPF-560CR(T)

15 W ceiling-mounted cleanroom loudspeaker, max. SPL 88 dB, IP 31

BLC-550CR(T)

15 W ceiling-mounted cleanroom loudspeaker, max. SPL 88 dB

IP LOUDSPEAKERS
SERIES AFLS

A wide range of innovative functions sets the network-compatible Commend IP loudspeakers apart from any classic PA solution. Since IP-based loudspeakers by Commend can be used in IoIP as well as SIP environments, they integrate easily and seamlessly into Commend Intercom or VoIP/SIP-PBX systems. Another feature that raises the loudspeakers above classic PA systems is their upward compatibility. This allows new functions to be added effortlessly via a simple software download.

HIGH VOLUME CAPACITY AND BRILLIANT SPEECH QUALITY
thanks to integrated 10-Watt Class-D amplifier. Intelligent Volume Control (IVC) automatically adjusts the volume setting to ambient acoustic conditions, even while outputting sound.

NO NEED FOR CENTRAL AMPLIFIERS
Direct network connection via IP using PoE. This enables solutions with separately placed loudspeakers as well as decentralised arrangements.

ZONES AND ADDRESSING
Each loudspeaker can be addressed and configured individually. Loudspeakers can be assigned to individual groups and zones.

IP horn loudspeaker

AFLS 10H HG | IP66, for outdoor areas and industrial environments. Max. sound pressure: 118 dB.

IP projector loudspeaker

AFLS 10H PW | IP54, for indoor and outdoor areas that are protected against environmental influences. Max. sound pressure: 101 dB.

IP ceiling-mounted loudspeaker

AFLS 10H CW | IP 54, for indoor areas. Max. sound pressure: 105 dB.

PERIMETER PROTECTION

Reliable all-round protection is essential when it comes to securing security-critical outdoor areas. Modern CCTV/ video surveillance does not provide any means of actively intervening in events on-site to defuse critical situations. Commend solutions provide the essential audio component to make this possible. Bi-directional audio connections allow staff at the control desk to observe and actively intervene in ongoing events at the site under surveillance. The clear advantage over 'classic' video-only surveillance is obvious: a firm warning can defuse or even prevent security-critical activities like vandalism or theft much more quickly and more effectively.

Autonomous warning system

If a person approaches the secured premises, a self-sustained, sensor-driven IP loudspeaker issues a specific pre-recorded voice message.


Automatic warning announcements, lights, video

Sensor-controlled IP loudspeakers can trigger automatic action sequences, e.g., turning on the lights, placing a call to the control desk and activating a CCTV camera.

Locating, instructing and recording

The operator at the security control desk receives a call. A map, video image and action checklist are shown, and recording starts automatically.

Proactive intervention

By addressing the person(s) at the site directly via Intercom, the operator can take proactive steps to resolve the situation.
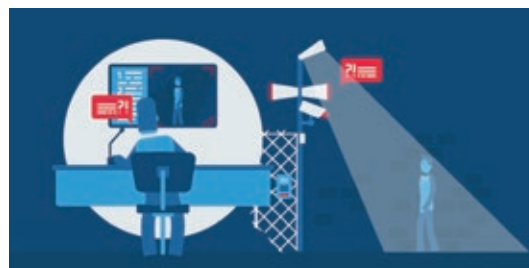
SOLUTION FOR CRITICAL INFRASTRUCTURES

Securing power and water utilities is becoming more and more important. This is why power plants, transformer stations and facilities for the extraction, storage and purification of water are increasingly being fitted with combined video surveillance and PA solutions. Even if there is no supervising staff present at the facility itself, the solution will respond to persons approaching the premises and issue pre-recorded warnings. Staff at the central control room are provided with real-time data connections over the network, allowing them to address unauthorised persons directly and taking appropriate measures. Data centres are likewise treated as critical infrastructures and are beginning to take advantage of this solution.

CONTROLLING ACCESS AND PROTECTING ASSETS

Commend system solutions play a literal 'key role' in enabling access control and corresponding management. Unauthorised persons are kept off the premises, which reduces the danger of industrial espionage, theft and vandalism.

Prevention of unauthorised access and protection for employees and assets

Helps to defeat against industrial espionage, theft and vandalism

Improves efficiency at access gates and doors

Supports security staff both on the premises and off

Management and control of access gates, doors and airlocks

Perimeter protection

Combines Intercom with CCTV (video surveillance)

Enables silent alarms

Loud and clear

Whatever the need, from greeting visitors with an automatic welcome message to enabling lorry drivers to communicate with front desk staff with engine noise in the background – Commend's hallmark speech quality helps to sustain business critical communication under any circumstance.

Strong protection

The Intercom stations are protected against vandalism. For this purpose, the devices feature a front plate made from 3 mm stainless steel, a poke protection mechanism, special tamper-proof screws, and sabotage detection contacts.

Access Readers

Installation housing for access readers

WS 300 V

Station with one or three buttons; camera

WS 311V DA

Station with one button, camera, induction loop amplifier

WS 200 V

Station with one or three buttons

WSDU 52V AM

Housing for an access reader

MANAGEMENT OF FACILITY ACCESS POINTS

Lorries and transporters keep arriving at the gates to deliver raw materials, goods, supply parts, and other items. Passenger cars of visitors and service providers also request access to the facilities. The ability to prevent unauthorised access requires a clearly defined management solution. A pre-defined set of rules defines who should be granted access, as well as where and when. This ensures that only authorised persons or vehicles are granted access to the indoor or outdoor areas for which they have been cleared.

CENTRAL MANAGEMENT

Calls from arriving lorries, transporters and passenger cars can be processed quickly and competently at a control centre and forwarded to the appropriate warehouses, loading bays and buildings. Announcing deliveries also helps to speed up things at the respective loading areas. This eases the workload of staff, ensures optimum use of staff resources and also saves delivery drivers unnecessary delays.

ENGINE NOISE

Commend ensures smooth, trouble-free communication even with loud lorry engines running in the background. This is made possible by special background noise suppression.

INSTRUCTIONS FOR DRIVERS

Delivery drivers need clear instructions directing them to the appropriate loading bay. On large premises, signs can be complemented by digital displays at the entrance gates that indicate to drivers where to go. Everything is managed and controlled centrally with the help of Commend solutions.

Column range

Commend columns are available in a variety of versions up to a height of 238 cm. The larger-sized version accommodates up to two Intercom stations (for lorries and passenger vehicles).

EN 81 COMPLIANT
LIFT EMERGENCY CALL SYSTEM

"What happens in case of a technical fault or in an emergency situation?" This is a question every company with lift facilities will have to face — and find a proper answer to. Lift emergency call systems by Commend provide a competent solution that meets the highest personal safety standards. Customisable and easy to install, the system delivers voice messages with ultimate clarity in brilliant speech quality.

Round-the-clock help at the push of a button

Commend communication technology connects calls much more quickly than conventional emergency call equipment. In case a call is queued, a pre-recorded message reassures the persons in the lift car and helps to avoid panic situations.

Integration with control centres

Emergency call recipients (e.g., a local or regional control room) can be defined as needed. In case a call cannot be answered immediately, it can be forwarded to other Intercom stations, telephones or mobile devices.

Flexible connection technology

Individual components can be integrated into the Commend communication platform either via the IP network (IoIP/SIP) or using digital 2-wire connections. Upon request, any combination of these can be implemented as well. Any existing cable lines can be reused, which eliminates extra costs.

The solution can be integrated in the Commend system or SIP-PBX systems as needed.

### Standard compliant function self-checks

According to European standards, lift facilities must be fitted with an emergency call point. The regulations require an inspection and test call to be performed on each call point at regular three-day intervals. The Commend solution does this fully automatically, saving valuable staff and time resources.

An additional loudspeaker-to-microphone and line monitoring function ensures the permanent readiness of the stations.

What is more, the call button can also perform a self-check and simulate an emergency call to make sure everything is working properly.

In case a self-test fails, the system instantly notifies the technical staff in charge.

Since all self-tests are logged, they can be audited later on if necessary.
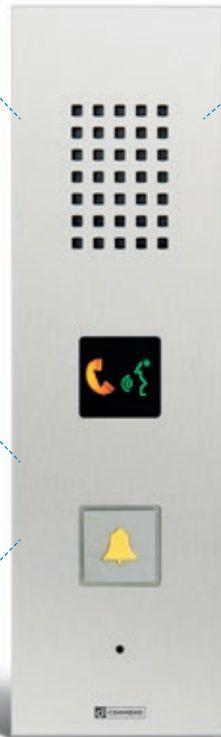
Lift emergency call station

Y-LIFT-S | Station with remote-testable call button and two rear-illuminated status indicating pictograms. V-2A front panel for integration into lift control panels.

Functional emergency call station for lift car roofs and lift shafts

EF 870AEN81 | Station with robust steel housing; colour: Signal Yellow.

Flexible modules for lift cars

Commend also provides a range of optional modules in various form factors and scopes that can be integrated into the system upon installation or retrofitted later on.

In most cases existing loudspeakers, microphones or display units (pictogram panels) can be connected to a new module to retain the lift manufacturer's overall design.

BETTER TOGETHER

When it comes to security and communication, the smooth interplay of all integrated components is essential. Reliable data exchange allows processes to be mapped across different systems to leverage their full potential. Commend Intercom systems support open standards such as OPC, SIP and TETRA, DMR, Modbus, KNX, SNMP and others, offering a variety of well-tested interfaces to third-party systems.

INTEGRATE
Interfaces and open standards enable a seamless integration of various different systems.

AUTOMATE
Data exchange between the systems is fully automated. Triggers events and actions can be defined across all integrated systems to suit individual needs.

PROFIT
If required, you can easily set up automated processes that help you maximise efficiency and ensure personal safety for your staff.

Video	Audio Public Address PAGA	Building and Facility Management Modbus / KNX / OPC UA
VoIP/SIP-Server*	VoIP/SIP telephones Analogue telephones Mobile telephones	Public telephone networks
Monitoring inputs and controlling outputs	Access management for barriers and doors	Digital and analogue radio systems
Signal beacons, display panels and visual alarms	Sensors	SDK Custom interfaces and third-party systems

TECHNOLOGY PARTNERS

You can interface your Commend system with third-party systems of leading manufacturers**.
Options range from video management systems to access control equipment and PA solutions.

TKH GROUP | TKH SECURITY · Genetec · milestone · advancis · prysm COMMAND AND CONTROL SOFTWARE

vidsys · Honeywell · SECURITON · Hanwha Techwin · avigilon a Motorola Solutions Company

Lenel United Technologies · PACOM · tyco | CEM Systems · IndigoVision · Dallmeier

ela soft · FLIR · Qognify · PKE · GEUTEBRUCK

SMC gateway · sepura · MOTOROLA SOLUTIONS · AVAYA · GALLAGHER

* SIP-PBX compatibility: Digium | Cisco | AVM | Alcatel | Mitel | Siemens | Kamailio | Innovaphone | Unify | 3CX | Starface | Aastra | Elmeg | Avaya | FreeSWITCH.

** All products or company names mentioned on this web site are brands or registered trademarks of their respective owners.

INTERCOM SERVERS WITH BUILT-IN HIGH AVAILABILITY

The world's first 100% software-based Intercom Server by Commend (currently Version 9) is designed specifically to integrate seamlessly into the flexible, dynamic world of virtual IT environments.

It is here that the Software Intercom Server 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 very easy to maintain and requires no extra staff resources.

Embedded into the virtual server infrastructures, the server can take advantage of their typically high-quality redundancy, backup and security mechanisms. This automatically ensures the essential high availability that has become a hallmark of Commend solutions.

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

Software Intercom Server

Up to 1,120 IP subscriber units per server
Virtuosis Server series for virtualised IT infrastructures using VMWare or Microsoft Hyper-V.

Intercom Server S6

Up to 448 IP subscriber units per server
Mono-socket rack server (1U), with Virtuosis server software.

Intercom Server S3

Up to 112 IP subscriber units per server
Wall-mounted server with Virtuosis server software.

Intercom Server GE 800

Up to 896 IP subscriber units or 56 digital 2-wire subscriber units per server

Rack-mounted server (3U) with PRO 800 server software, 14 card/plug-in slots for additional subscribers, inputs/outputs, interface ports (e.g., audio for mobile radio gateway).

IT SECURITY

Commend has a tradition of passionate commitment to security, both physical and digital. Whatever the size of your Commend system and your underlying network infrastructures, regardless of how it keeps growing and changing – IT security for our customers and users is a business-critical priority. Moreover, it is a cooperative effort that requires collaboration along the entire product supply chain, from the vendor to the end-user.

Obviously, there is no easy "set and forget" solution. IT security is not a static condition but an evolving process that requires active management.

At Commend we are working continuously to fortify our systems, products and solutions against cyberattacks and to provide multi-level protection for network-based services.

For further details about our technical IT security measures please refer to our IT Security Guidelines or contact your local Commend representative.

150+ COMMEND FUNCTIONS
45+ YEARS OF EXPERIENCE
ONE POWERFUL PLUS

![commend]

COMMEND WORLDWIDE

23 subsidiaries/partners operating in more than 59 countries.
More than 500 employees worldwide.

EUROPE
AMERICA
ASIA
AFRICA
AUSTRALIA
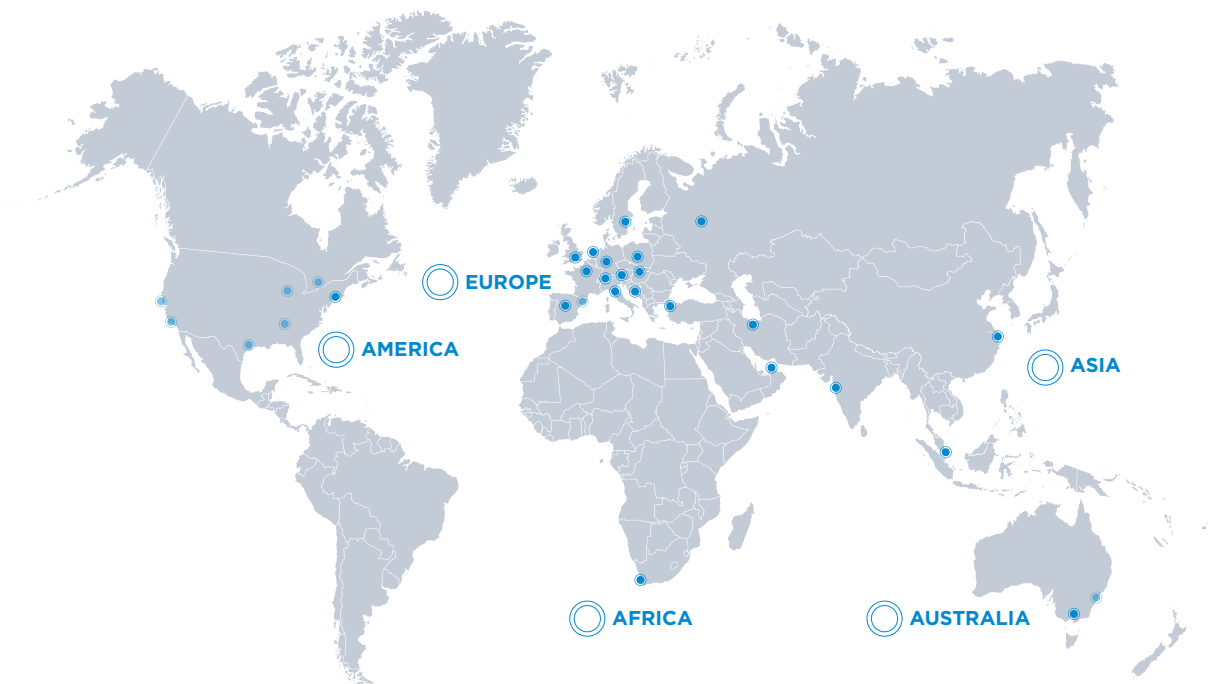
SECURE COMMUNICATION
SYSTEMS BY COMMEND

Can you imagine a system that millions of people rely on every day, where every word has to count? That's the world of Commend! Secure, reliable communication is our passion. We are a global market leader with more than 45 years' experience in speech transmission. In addition to Intercom and video connections that interface with third-party systems we also provide products that open up new possibilities for integrated solutions. Commend is the first choice worldwide when it comes to secure and professional communication systems.

**If you want to learn more about
our Industry solutions,
feel free to contact us.**

industry.commend.com

AUSTRIA
OBS
ESSIVE
ABOUT
QUAL
ITY

Quality-tested. Reliable. Well-designed. COMMEND products are developed and manufactured by Commend International in Salzburg, Austria. Our development and manufacturing processes are certified as per EN ISO 9001:2015.

Technical details are provided for descriptive purposes only and do not constitute a legally binding guarantee of product properties. IoIP®, OpenDuplex® and Commend® are registered trademarks of Commend International GmbH. All other brand and product names are trademarks or registered trademarks of their respective owners and are not explicitly marked as such in the text.

SF-Industry-EN-V11-0221