



2022/2023

CATALOGUE

A Compendium full of Communication Solutions

TRUSTED. COMMUNICATION. ALWAYS.



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. Our customers' voice has been our most important source of inspiration and creativity for 50 years and will continue to be our creative driving force for the next 50 years. Let's be creative together! We are looking forward to being in touch.

TRUSTED. COMMUNICATION. ALWAYS.

TABLE OF CONTENTS

INTRO.....	3
Symphony by Commend.....	5
Symphony by Commend.....	8
Symphony Mesh.....	9
Symphony On-Prem.....	10
Symphony Bridge.....	11
Audio Quality.....	12
Cyber Security.....	14
Building Security.....	16
Transport & Infrastructure.....	18
Industrial Communication.....	20
Maritime Communication.....	22
INTERCOM STATIONS.....	26
Intercom Stations - Series Concerto.....	27
Wallmount Intercom Stations.....	32
Membrane-Protected Intercom Stations.....	35
Wallmount Stations with Handset Function.....	38
Vandal resistant Intercom Stations.....	39
Vandal resistant Emergency Call Stations.....	42
Desktop Intercom Stations.....	48
Counter Intercom Systems.....	52
Industrial Intercom Stations for Rough Environments.....	54
Industrial Intercom Stations for Explosion-Prone Environments.....	60
Detention Cell Terminals.....	65
Control Desk Systems.....	68
MODULES.....	71
Modules.....	72
INTERCOM SOFTWARE.....	78
Control Desk Management - Studio by Commend.....	79
Symphony Mobile Client.....	83
Symphony Web Client.....	84
Intercom Client for Windows.....	85
PUBLIC ADDRESS.....	86
Network-compatible Loudspeakers.....	87
Network Compatible Amplifiers.....	89
Loudspeakers.....	92
INTERCOM SERVERS.....	95
Software Intercom Server - VirtuoSIS.....	96
Intercom Servers - S Series.....	99
Intercom Server in 19" technology - GE 800.....	102
Compact Intercom Server - GE 300.....	108
ACCESSORIES.....	112
Accessories.....	113
INTERFACES AND INTEGRATION.....	118
Commend Certified Interfaces.....	119
ComOPC UA Server.....	121
ComPLC Interface Designer.....	122
INFORMATION.....	123
Information.....	124



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

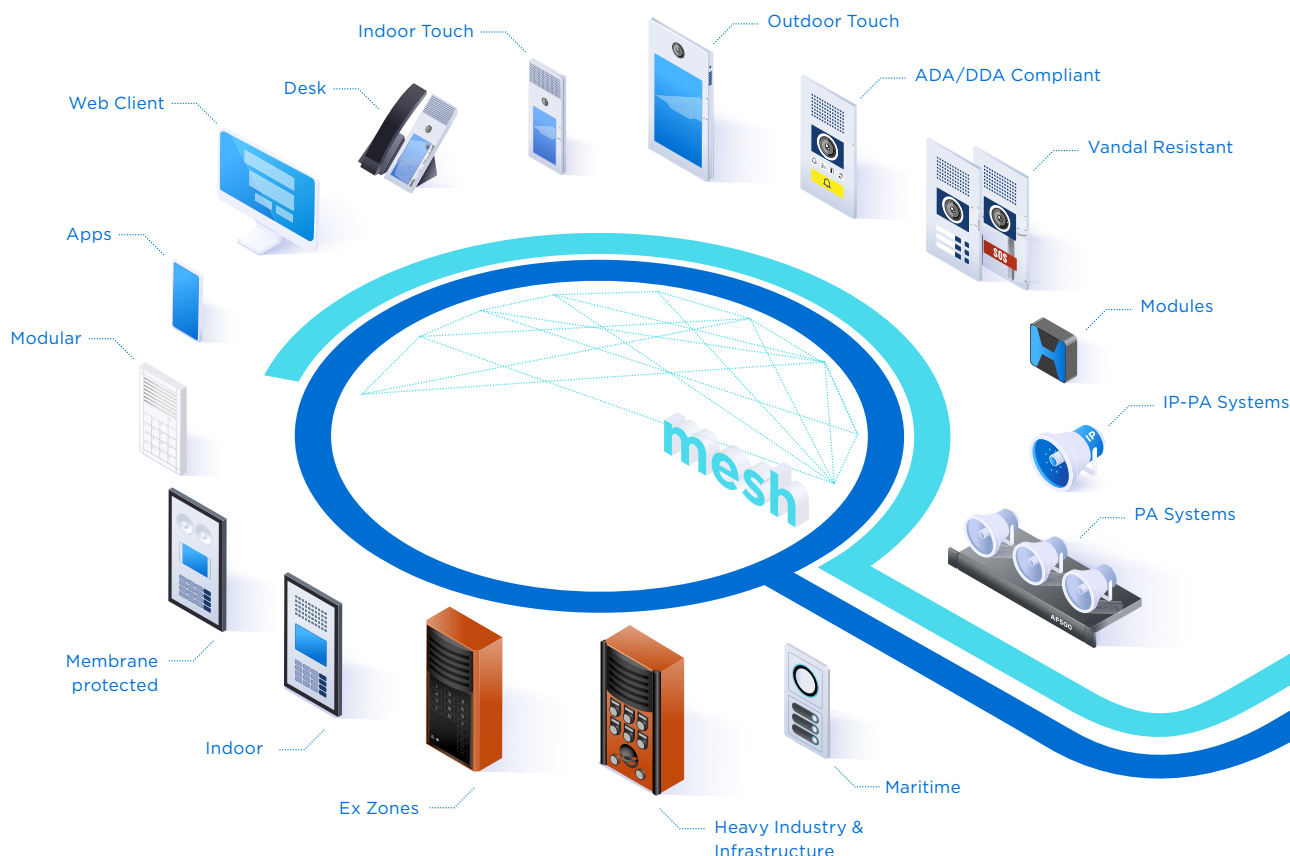
Commend has always been dedicated to reliability, consistent action and long-term durability. As a result, we won't shy away from taking an unconventional approach. However, this won't make the world of 'classic' Commend Intercom obsolete. On the contrary, we are committed to rebuilding and further developing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

SYMPHONY BY COMMENT

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.

TRUSTED. COMMUNICATION. ALWAYS.



TOUCHING

Touch-operated Intercom stations for outdoor and indoor areas that adjust to the required application - whether in reception areas, as information terminals, or for internal communication.

BARRIER-FREE

Special Intercom stations for people with visual and/or hearing impairments. Intercom stations with touch display are also well suited for the purpose and provide helpful visual user guidance.

INDIVIDUAL

Modules for custom-built Intercom stations - as information terminal with touch display, as help point, or for integration in components and devices, such as barriers or ticket vending machines.

VANDAL-RESISTANT

Durable Intercom stations for entrances, gates or information and emergency call points.

HYGIENIC

Intercom stations with sealed membrane surface for communication in clean rooms and laboratories, hospitals, and pharmaceutical and industrial facilities.

INDUSTRIAL

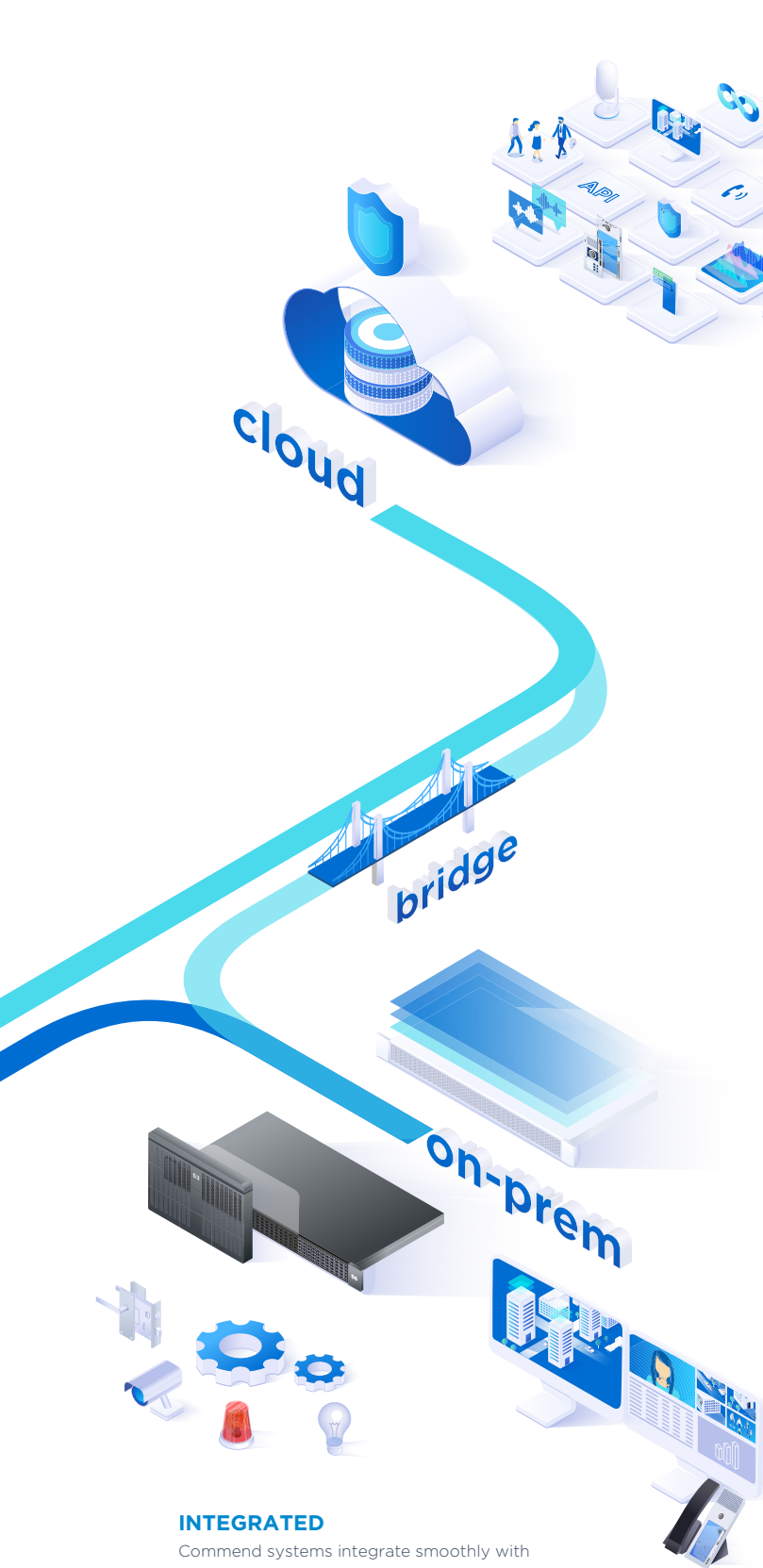
The solution enables efficient team communication in all industrial environments, including environments involving hazardous and explosive atmospheres.

MARITIME

Modular Intercom brings brilliant communication to yachts and ships that is designed to weather any storm on the world's oceans.

LOUD

A high sound volume, combined with functions such as IVC (Intelligent Volume Control) and powerful networking technologies is the winning formula behind Comment's Unified PA solutions.



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 make buildings smarter and safer, both in everyday situations and in emergencies.

SYMPHONY MESH

IP devices (Symphony MX / Symphony BF) combine into an intelligent autonomous communication network. They also integrate seamlessly with on-prem servers and the Symphony Cloud.

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.

SYMPHONY BRIDGE

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

INTEGRATED

Commend systems integrate smoothly with leading third-party systems from video management and access control solutions to public address arrangements and security suites.

CONTROLLED AND NETWORKED ACROSS THE GLOBE

Commend Control Desk solutions keep operators up to date and in full control of the system to enable instant intervention and response in an emergency. Managing even complex Intercom networks or video and control functions is a breeze, locally as well as across multiple sites worldwide.

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



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 many 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.

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.



RELIABLE, CENTRALISED, CLASSIC

SYMPHONY ON-PREM

Decades of experience in Security Intercom have allowed us to rethink the basic challenges involved in 100% reliable building 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).



A POWERFUL CONNECTION

SYMPHONY BRIDGE

The Bridge opens the world of on-premise solutions to Symphony Cloud services such as mobile iOS and Android clients or the Web Client that provides convenient call management in a browser window. 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. We have some great things planned, with our next Symphony services already in the works or being evaluated in selected pilot studies. With Symphony On-Prem and Symphony Bridge access to this world of new possibilities is just a click away.



” Passion for
audio quality

COMMEND STANDS FOR

ULTIMATE SPEECH QUALITY IN EVERY SITUATION

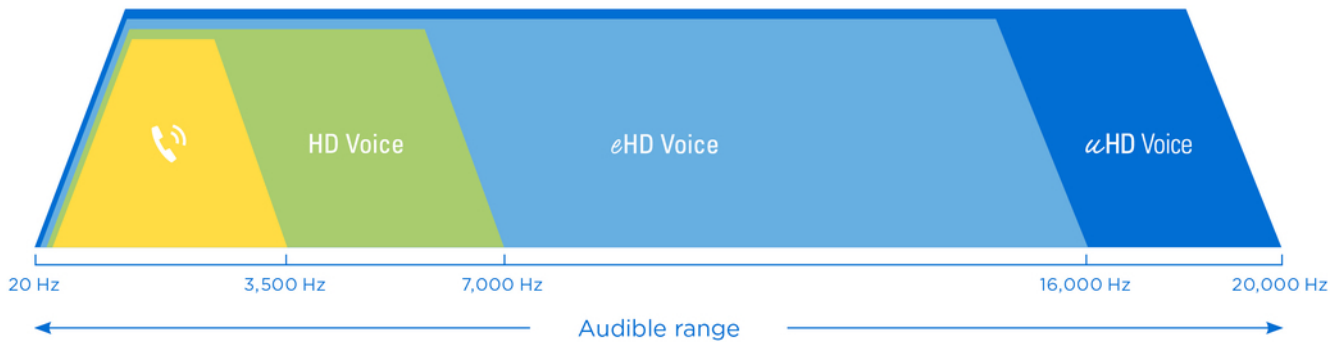
Since its foundation over 50 years ago, Commend has been researching and perfecting the speech quality of its systems to support customers and users with ultimate speech intelligibility even under the harshest conditions.

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.

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 ADJUSTMENT



BACKGROUND NOISE 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.
- **Dynamic Background Noise Suppression** ensures optimum speech intelligibility even against loud background noise.
- **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 SHARED GOAL

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 the area of industrial control and automation systems (ICS), the facilities that use them are increasingly becoming targets of cyber attacks. Security mechanisms are increasingly important as a result.

There are no simple solutions to cover all security requirements. Regardless of the size of a Commend system and its basic networking infrastructure, cyber security is a common effort shared by everyone along the entire product supply chain, from provider to end user.

The ultimate goal is a systematic, responsible risk management on all levels, based on the principle of 'Privacy and Security by Design'.

TRUSTED. COMMUNICATION. ALWAYS.

trust.commend.com

HIGH-LEVEL CYBER SECURITY PROTECTION

To us, **Privacy and Security by Design** (PSBD) is much more than a catchphrase. In practice, it implies keeping to stringent information security goals:



SUSTAINABLE PROTECTION AND CONFIDENTIALITY OF CUSTOMER DATA AND COMMUNICATION



DATA INTEGRITY THROUGHOUT ALL SYSTEMS AND COMMUNICATION LINES



HIGH AVAILABILITY OF ALL PRODUCTS AND SERVICES



Member of the Center for Internet Security (CIS)

To keep up with the fast-paced technical developments with respect to 'Security by Design', Commend maintains research and development partnerships with third-party manufacturers, security experts and universities while leveraging its membership in security-specific organisations such as the Center for Internet Security (CIS).



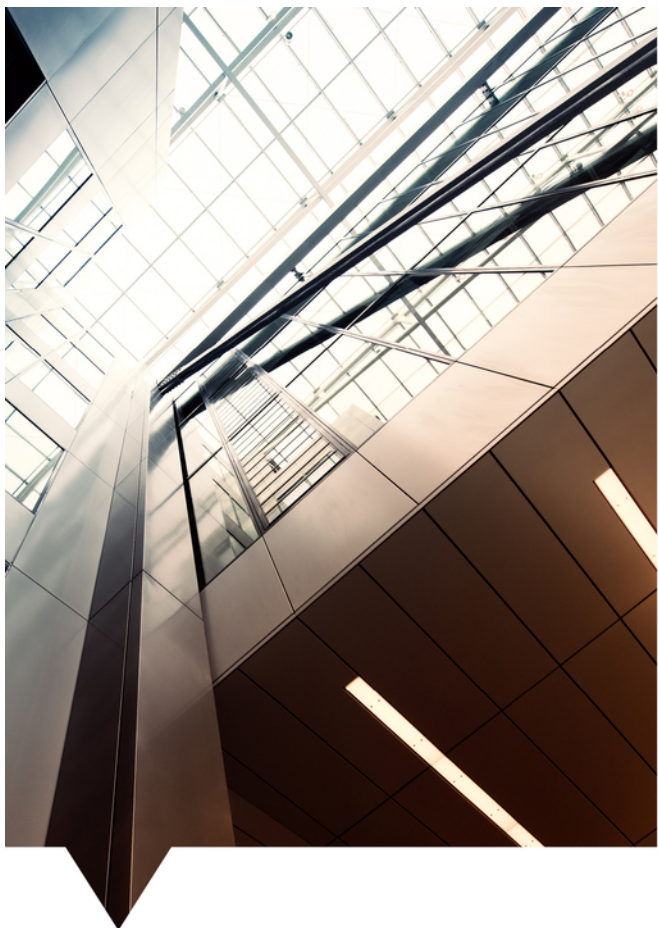
IEC ISO 27001 certified Cyber security begins at home.

At Commend cyber security begins in our own organisation, and it shows in the way we work: in full compliance with strictly certified IEC ISO 27001 standards, based on a company-wide Information Security Management System (ISMS). Our ISMS takes everything into consideration, from our staff to our corporate processes and IT systems, based on continuous risk management. Since late 2019 Commend International GmbH has been fully EN ISO 27001:2013 certified across the entire corporate structure, including all development teams.



IEC 62443 certified Cyber security in compliance with Industry 4.0 standards

As part of our far-reaching "defence in-depth" strategy, cyber security at Commend is rooted deeply in our corporate culture, and we provide sustained support for our customers' security strategies. This is no empty promise - and to prove that we have decided to earn a further certification. Since December 2021, Commend International GmbH in Salzburg is officially the world's first Intercom system manufacturer to hold an IEC 62443-4-1 certificate based on the IT Security series of standards.



INFORMATION THAT PROVIDES SECURITY

BUILDING SECURITY

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 Threat Reaction Systems (ETRS) 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.



MULTI TENANT BUILDINGS



CORPORATE BUILDINGS



PUBLIC ADMINISTRATIVE BUILDINGS



EDUCATION FACILITIES



HOSPITALS AND HEALTHCARE FACILITIES



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 AND
WATERWAYS**

ABOUT COMMEND

PASSION FOR SECURITY AND COMMUNICATION



1971

Founded in Austria



23

Sales organisations worldwide



60+

Operating in more than 60 countries



200+

Employees at Commend International in Salzburg



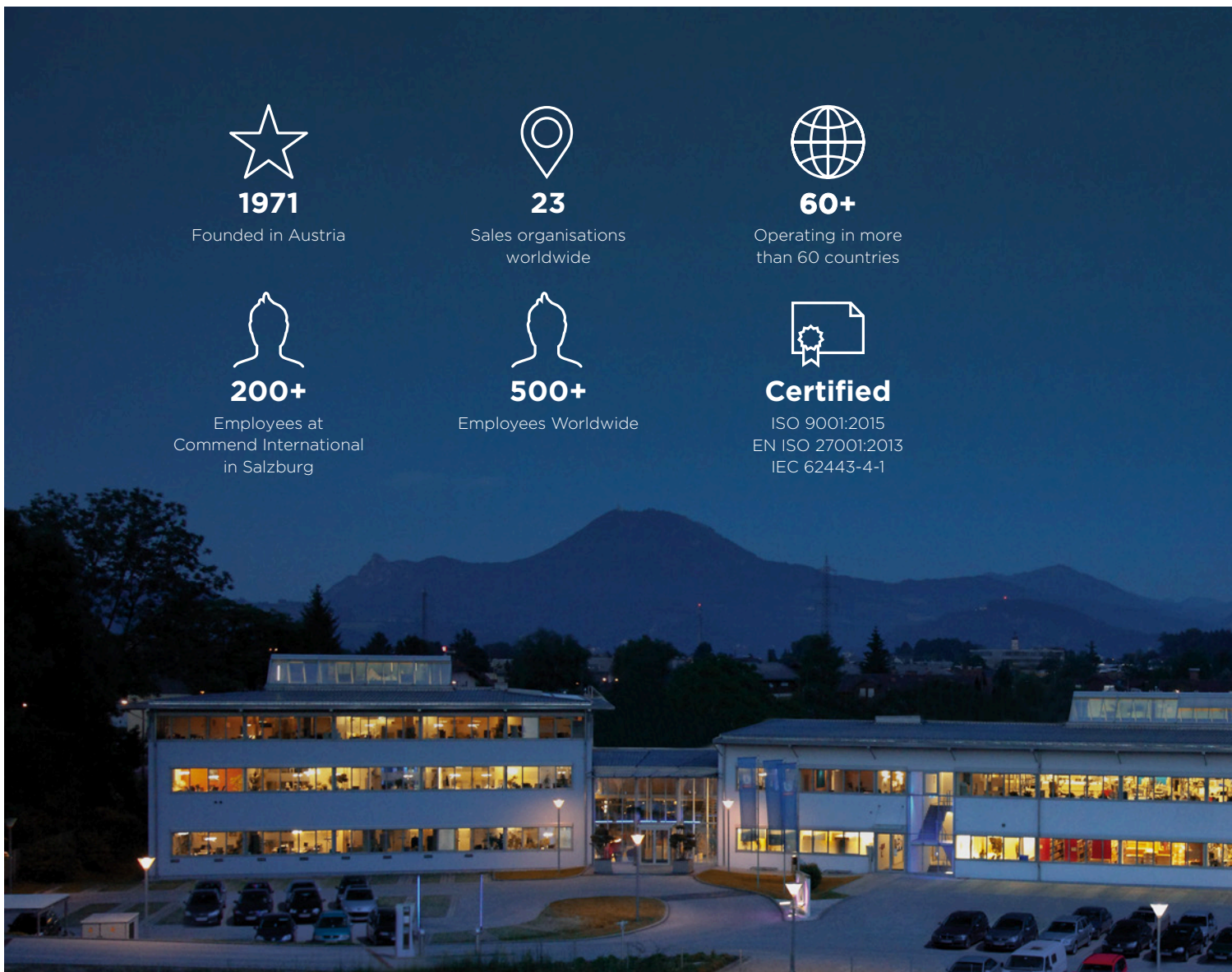
500+

Employees Worldwide



Certified

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



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. Proven Commend Evergreen Engineering bridges product generation gaps. As a result, 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 is second to none.



EFFICIENT COMMUNICATION, DESIGNED FOR OPTIMUM 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.



” There is a solution for every customer need



CUSTOM-TAILORED HARDWARE AND SOFTWARE CUSTOMISED 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.

THE SOLUTIONS WE DEVELOP AND BUILD

- 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

Contact your local Commend partner for further information.

commend.com/contact

INTERCOM STATIONS - SERIES CONCERTO



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:

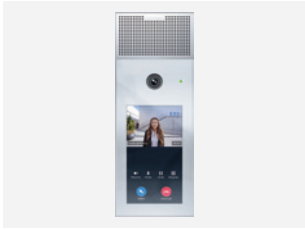
- Intercom stations for outdoor and indoor environments
- High-quality sheet glass or high-grade steel front panel and aluminium frame
- Integrated high-resolution wide angle colour video camera
- Daylight-ready multi-touch displays with brilliant colour reproduction
- OpenDuplex® and IVC for natural, 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)

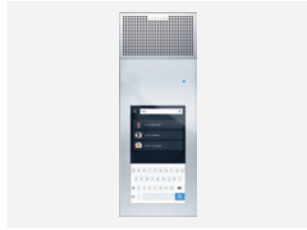
od10	175 × 325
od5	86 × 228
od1	86 × 228
id5	86 × 228

INDOOR INTERCOM STATIONS WITH TOUCH DISPLAY - SERIES ID5



ID5 TD CM

Indoor Intercom Station with 5-inch touch display and camera

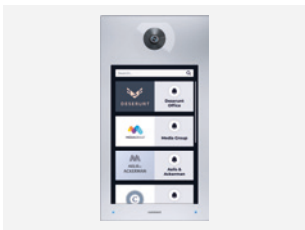


ID5 TD

Indoor Intercom Station with 5-inch touch display

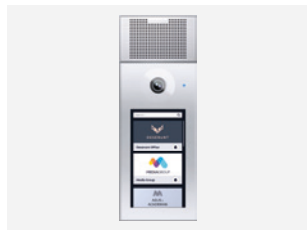
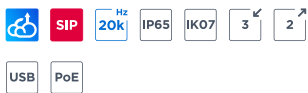


OUTDOOR INTERCOM STATION WITH TOUCH DISPLAY - SERIES OD10 | OD5



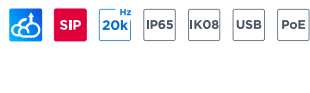
OD10 TD CM

Outdoor Intercom Station with 10-inch display and camera



OD5 TD CM

Outdoor Intercom Station with 5-inch touch display and camera

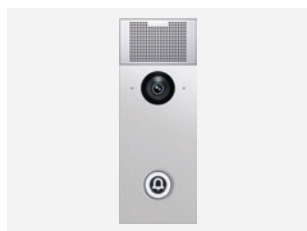


OUTDOOR INTERCOM STATIONS - SERIES OD1



OD1 CM

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



OD1 V CM

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

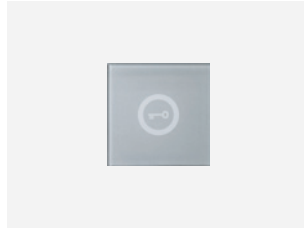


EXPANSION MODULES – SERIES CONCERTO



OD10 FBDUR

Dummy module for RFID access readers for Series od10 Intercom stations



ODX 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 "Push to Talk" button and USB connection

ACCESSORIES - SERIES CONCERTO



AFIL-USB

Audio induction loop upgrade kit for transmission of Intercom audio signals to hearing aids; suitable for all 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 12 VDC (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



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



ID5 DKAD

Desktop Kit with adjustable tilt angle for Series id5 Intercom Stations



ID5 DK

Desktop Kit for Series id5 Intercom stations

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



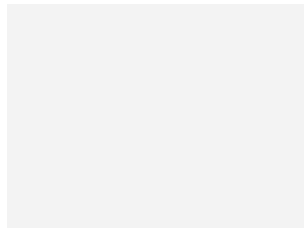
XDX FB

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

WALLMOUNT INTERCOM STATIONS

Perfect in internal
Communication



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. This makes it possible, for example, to switch on a beamer while turning off the lights and shutting the blinds in a training room or lecture hall – all at the push of a single button.

KEY FEATURES:

- Intercom Stations for outdoor and indoor environments
- Casing made from robust high-grade polycarbonate
- Intercom stations with TFT or 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 810P | WS 800P



WS 810P I

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



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 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



WSTM 50P

Expansion module with TFT display

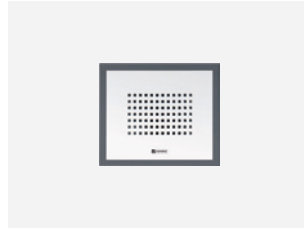
IP66



WSIL 50P

Expansion Module with Audio Induction Loop Amplifier, conforms to IEC 60118-4

IP66



WSLM 52P

Active 2-Watt Loudspeaker Module

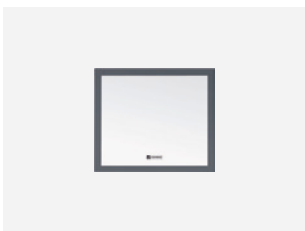
IP66 101^{dB}



WSLM 56P

Active 6-Watt Loudspeaker Module

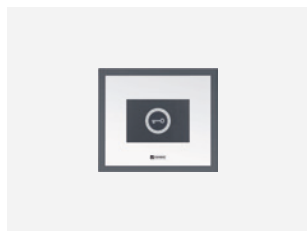
IP66 108^{dB}



WSDU 52P

Dummy Module

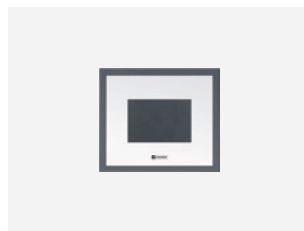
IP66



WSDU 52P AM

Dummy module with access reader symbol

IP66



WSDU 52P TW

Dummy module with transparent viewing panel

IP66



WSDU 50P

Dummy Module

IP66



WSHS 50P-JST

Expansion module with handset and "Push to talk" button



WSEB RJ45

Ethernet Downlink Extension Kit for installation in Series WS Camera and TFT Expansion Modules



WSEB IL

Audio Induction Loop Extension Kit for transmission of Intercom audio signals to hearing aids; suitable for Series WS Intercom Stations

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 TFT or 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 810F | WS 800F



WS 810F I

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



WS 800F I

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



SIP-WS 800F

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



WS 800F D

Intercom Wallmount Station with 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

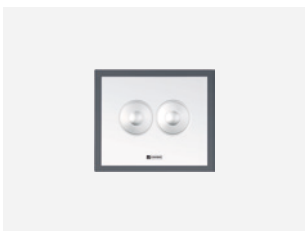


WS 800F D MD

Wallmount Intercom Station for medical and clean room environments, with LC display, full keypad and function keys, conforms to IEC 60601-1 (2nd Edition)

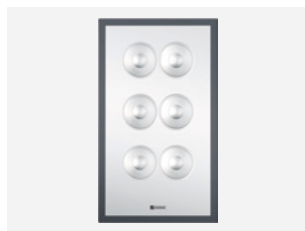


EXPANSION MODULES - SERIES WS F



WSLM 52F

Active 2-Watt Loudspeaker Module with sealed membrane surface



WSLM 56F

Active 6-Watt Loudspeaker Module with sealed membrane surface





WSFB 50P

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



WSFB 52P

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



WSSH 54P

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



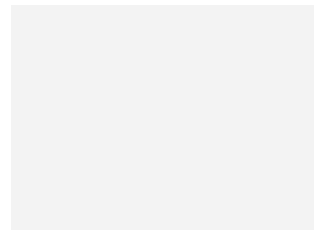
WSDM P

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: 0.3 m

WALLMOUNT STATIONS WITH HANDSET FUNCTION

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



WALLMOUNT STATIONS WITH HANDSET FUNCTION – SERIES EE 420



EE 420S

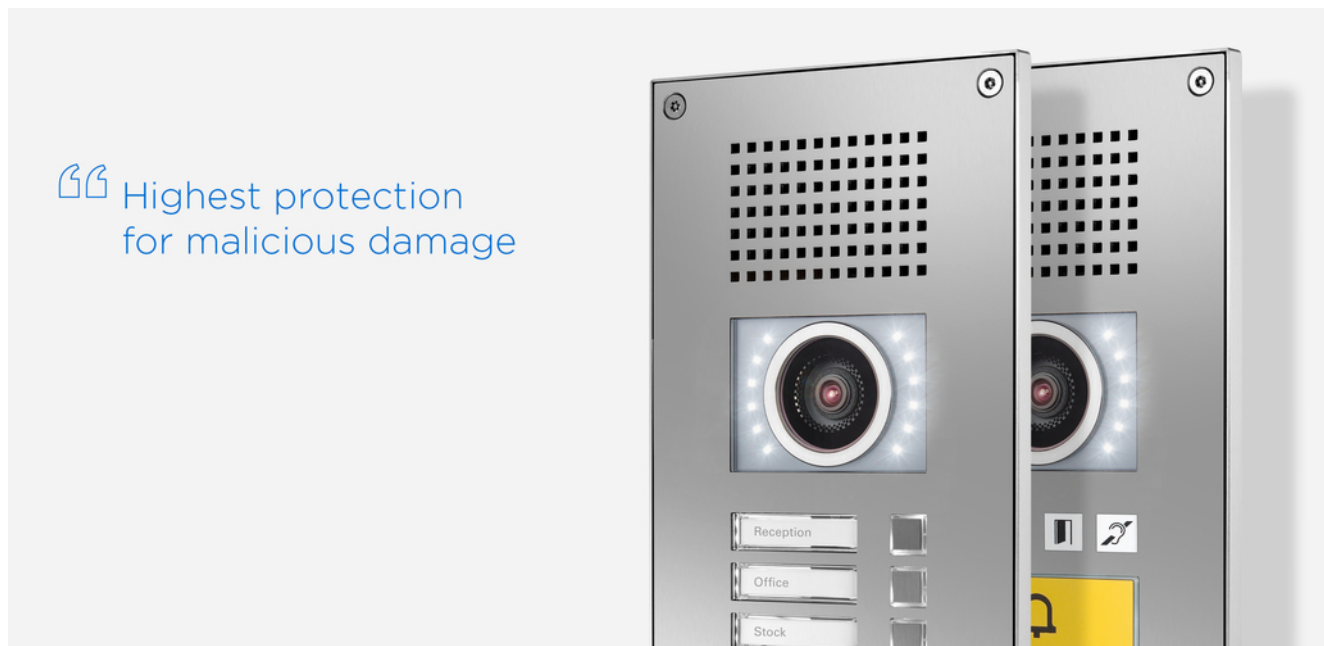
Intercom Wallmount Station with LC display, full keypad and function keys; black

EE 420G

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



VANDAL RESISTANT INTERCOM STATIONS



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

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 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

IoIP
16k
IP66
IK07
3
2
PoE



SIP-WS 800V

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

SIP
7k
IP66
IK07
3
2
PoE



WS 800V D

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

D
16k
IP66
IK07
3
2
PoE

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

IoIP
SIP
20k
IP66
IK09
USB
PoE



WS 211V I DA

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

IoIP
16k
IP66
IK07
3
2
PoE



SIP-WS 211V DA

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

SIP
7k
IP66
IK07
3
2
PoE



WS 211V D DA

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

D
16k
IP66
IK07
3
2
PoE

VANDAL RESISTANT INTERCOM STATIONS – SERIES EF 962 | EF 862



EF 962H

Vandal resistant Intercom station, made from high-grade steel, with call button

IoIP
SIP
7k
16k
IP54
IK09

1
1



EF 862A

Vandal resistant Intercom station, made from high-grade steel, with call button

D
16k
1
1

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



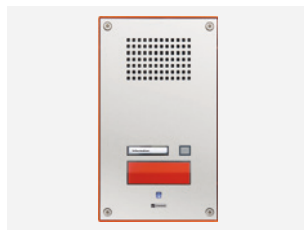
SIP-WS 211V

Vandal resistant Emergency call station with emergency call button



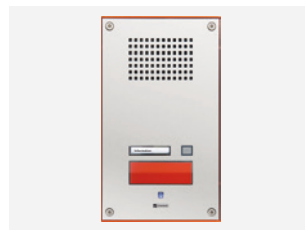
WS 211V D

Vandal resistant Emergency call station with emergency call button



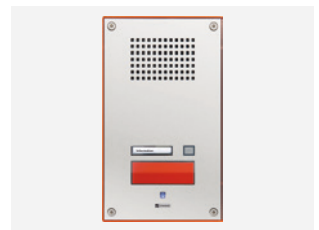
WS 212V I

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



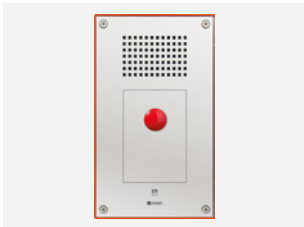
SIP-WS 212V

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



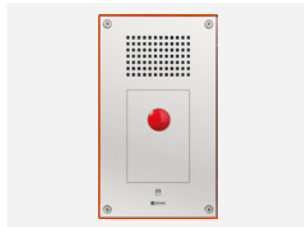
WS 212V D

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)



VANDALISM-RESISTANT EMERGENCY CALL STATIONS – SERIES EF 962M | EF 862M



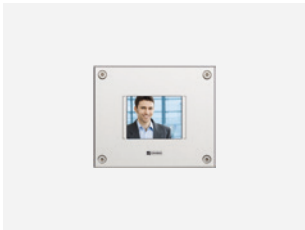
EF 962HM

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



WSTM 50V

Vandal resistant expansion module with TFT display

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

IP66

IP66

IP66

IP66



WSDU 52V AM

Vandal resistant dummy module with access reader symbol

WSIL 50V

Vandal resistant Expansion Module with Audio Induction Loop Amplifier, conforms to IEC 60118-4

WSDD 53V

Vandal resistant Expansion Module with three call buttons and label areas

WSDD 59V

Vandal resistant Expansion Module with nine call buttons with label areas

IP66

IP66

IP66

IP66



AFIL-USB

Audio induction loop upgrade kit for transmission of Intercom audio signals to hearing aids; suitable for all 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 12 VDC (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



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



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 SS 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



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 50V SS

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



WSSH 50V WA

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: RAL 9006



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 50V WA

Mounting Kit for surface mounting of Series WS V Intercom stations and extension modules; frame: RAL 9006

ACCESSORIES - SERIES WS V



WSRR 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-D 59V



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-D 59V



RJ45-MONT

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

ACCESSORIES - SERIES EF 962 | EF 862



GUEF 62

Basic casing for surface mounting and flush mounting of Series EF 862 and EF 562 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 62G

Surface-mounting frame with rain protection roof for Series EF 562, EF 862 and EF962 Intercom Stations; frame: RAL 9006



EF 62O

Surface-mounting frame with rain protection roof for Series EF 562, EF 862 and EF962 Intercom Stations; frame: RAL 2004 with "SOS" labelling



EF 62NIRO

Surface-mounting frame with rain protection roof for Series EF 562, EF 862 and EF962 Intercom Stations; frame: stainless steel

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 400	66 × 55 × 230
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, 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 | 800



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 311



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



EF 311AS

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



EE 372AS

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



DESKTOP STATIONS - SERIES EE 400



EE 411S

Intercom Master Station with LC display and full keypad - black



EE 411G

Intercom Master Station with LC display and full keypad - light grey



EE 401S

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



EE 401G

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

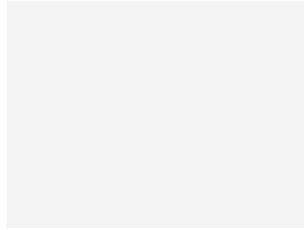


DESKTOP INTERCOM STATIONS - SERIES EE 400 | EF 400



EE 472S

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



EE 472G

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



EF 401S

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



EF 401G

Substation with three buttons (T, O, X), light grey



EE 400S

Intercom Master Station with LC display and full keypad - black



EE 400G

Intercom Master Station with LC display and full keypad - light grey



ACCESSORIES - SERIES EE 411 | 311



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 311, EE 400 and EE 410 Desktop Intercom Stations; colour: black



EW 401G

Wall-Mount Bracket for Series EE 311, EE 400 and EE 410 Desktop Intercom Stations; colour: light grey



EW 102

Wall-Mount Bracket for Series EE 200, EE 300 and EE 400 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 EE 880 | 480



AL 10-16S

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



AL 10-16W

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



PA30W15V

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

ACCESSORIES - SERIES GEC 880 | 480

For further accessories, e.g. external microphones, see Accessories (See Page 114)

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	175 × 315 × 102
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 STATIONS - SERIES EE 7504D



EE 7504D AC S

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



EE 7504D DC S

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



EE 7504D AC S H

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



EE 7504D DC S H

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



EE 7504D AC

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



EE 7504D DC

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



EE 7504D AC H

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



EE 7504D DC H

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



INDUSTRIAL STATIONS – SERIES EE 7008D



EE 7008D AC S

Industrial Intercom Station with 8 function keys, loud-speaker and AC power supply

D 16k Hz IP66 IK10 2 2



EE 7008D DC S

Industrial Intercom Station with 8 function keys, loud-speaker and DC power supply

D 16k Hz IP66 IK10 2 2



EE 7008D AC S H

Industrial Intercom Station with 8 function keys, loud-speaker, handset and AC power supply

D 16k Hz IK09



EE 7008D DC S H

Industrial Intercom Station with 8 function keys, loud-speaker, handset and DC power supply

D 16k Hz IK09 2 2



EE 7008D AC

Industrial Intercom Stations with 8 function keys and AC power supply

D 16k Hz IP66 IK10 2 2



EE 7008D DC

Industrial Intercom Stations with 8 function keys, for DC power supply

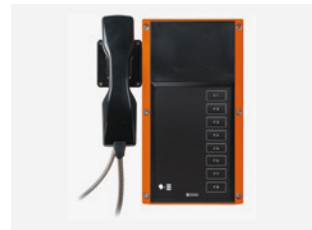
D 16k Hz IP66 IK10 2 2



EE 7008D AC H

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

D 16k Hz IK09 2 2



EE 7008D DC H

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

D 16k Hz IK09 2 2

INDUSTRIAL STATIONS - SERIES EE 7P04D



EE 7P04D AC S

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



EE 7P04D DC S

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



EE 7P04D AC S H

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



EE 7P04D DC S H

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



EE 7P04D AC

Industrial Intercom Stations with party-line keypad, 4 function keys and AC power supply



EE 7P04D DC

Industrial Intercom Stations with party-line keypad, 4 function keys and DC power supply



EE 7P04D AC H

Industrial Intercom Stations with party-line keypad, 4 function keys, handset and AC power supply



EE 7P04D DC H

Industrial Intercom Stations with party-line keypad, 4 function keys, handset and DC power supply



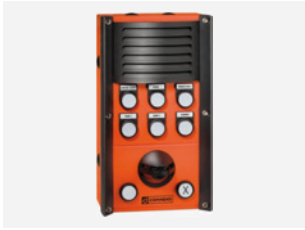
UPGRADE LICENSES - SERIES EE 7000D | EX 7000D



L-EX-AF-OUT

License 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

D 7k Hz IP66 2 2



EE 8108M

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

D 7k Hz IP66 2 2



EE 81ADMSOS

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

D 7k Hz IP66 2 2



EE 8999M

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

D 7k Hz IP66 2 2



EE 8999MSOS

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

D 7k Hz IP66 2 2



EE 8999S

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

IP66

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



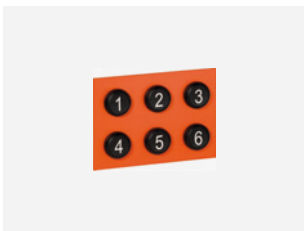
EM 650

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



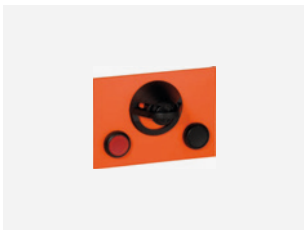
EM 606

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



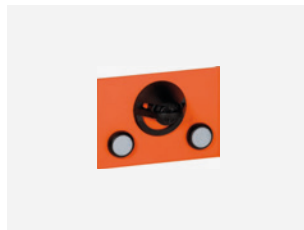
EM 605

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 EXPLOSION-PRONE 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 explosion-prone environments. 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 700	175 × 344 × 102
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 7008D S



EX 7008D 1 AC S

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

EX 7008D 2 AC S

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

EX 7008D 1 DC S

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

EX 7008D 2 DC S

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

EX 7008D 2 AC S H

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

EX 7008D 1 DC S H

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

EX 7008D 2 DC S H

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



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7008D



EX 7008D 1 AC

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

EX 7008D 2 AC

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

EX 7008D 1 DC

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

EX 7008D 2 DC

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

EX 7008D 2 AC H

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

EX 7008D 1 DC H

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

EX 7008D 2 DC H

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



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 keys, loudspeaker and AC power supply

EX 7504D 2 AC S

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



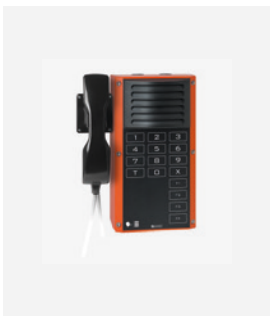
EX 7504D 1 DC S

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

EX 7504D 2 DC S

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

INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7504D



EX 7504D 1 AC

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

EX 7504D 2 AC

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



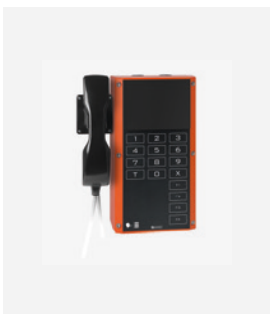
EX 7504D 1 DC

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

EX 7504D 2 DC

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

EX 7504D 2 AC H

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



EX 7504D 1 DC H

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

EX 7504D 2 DC H

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

EX 7P04D 1 DC S

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

EX 7P04D 2 AC S

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

EX 7P04D 2 DC S

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



INTERCOM STATIONS FOR EX ENVIRONMENTS – SERIES EX 7P04D



EX 7P04D 1 AC

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

EX 7P04D 1 DC

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

EX 7P04D 2 AC

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

EX 7P04D 2 DC

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

EX 7P04D 1 DC H

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

EX 7P04D 2 AC H

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

EX 7P04D 2 DC H

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





L-EX-AF-OUT

License 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

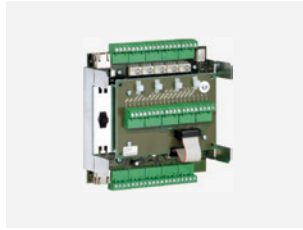
D Hz 7k 10 6



EB 330S

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

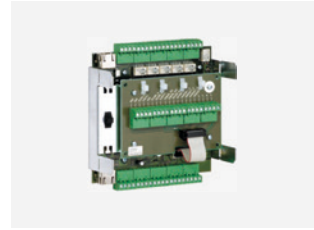
10 6



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.

D Hz 7k 10 6



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.

D Hz 7k 10 6



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.

D Hz 7k IP54 10 6

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, TFT 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)

CD 800	262 × 196 × 45
EE 980	270 × 138 × 37
EE 380	179 × 57 × 230

CONDUCTOR CONTROL DESK SYSTEM - SERIES CD 800



CD 810P I

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

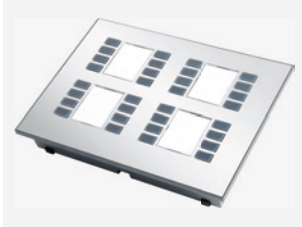


CD 800P I

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

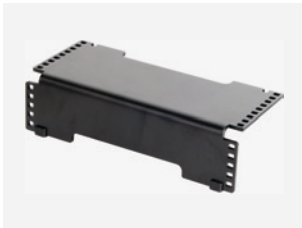
Expansion module with headset port



CDHS 50P

Expansion module with handset 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), output: 24 VDC with open cable tails; cable length: 1.5 m

DUETTO CONTROL DESK SYSTEM - SERIES EE 980



EE 980 CM

Control Desk Terminal with 7-inch touch display and camera



SIP-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

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



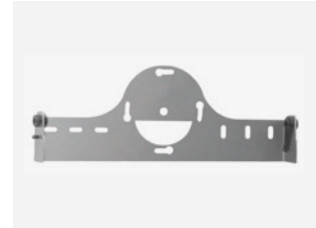
PA15WPOE

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



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



ASKKAT5-3S

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

CONTROL DESK SYSTEM - SERIES EE 380



EE 380AAS

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



EE 380ABEG

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 302EGS

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

MODULES

“ Multisensory Intercom Power for a whole world of new possibilities



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

Multi-sensory 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 via HS-Link port



IM3

Ultra-compact multi-sensory IP Intercom Module with metal housing, intelligent 6 W Amplifier, RJ45 port and camera connection via HS-Link port





CM1
HD camera with HS-Link port, optimised for Module Series im3 and im6

IP65 IK08



LSM
Loudspeaker, optimised for Module Series im3 and im6



AFIL-USB
Audio Induction Loop upgrade kit for transmission of Intercom audio signals to hearing aids; suitable for all Intercom Stations with USB ports



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

3 2 USB



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

IoIP SIP 2 3 PoE



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



EB8E8A
I/O Extension Module for Intercom Modules with USB port, for installation on top-hat rail

8 8 USB



EB1E1A
USB I/O Extension Module for Intercom Stations with USB port

1 1

IP-BASED INTERCOM MODULES



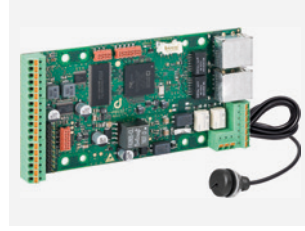
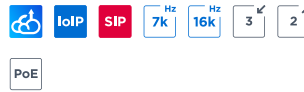
ET 908H

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



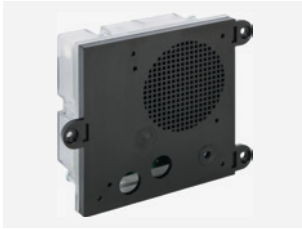
ET 908HMI

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



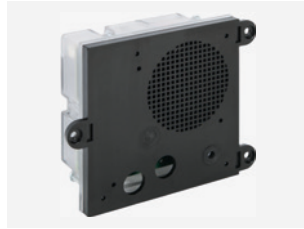
ET 908HMI-1

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 casing, 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 casing, built-in microphone, loudspeaker and connection ports for up to three call buttons



ET 970H

IP Intercom Module with polycarbonate casing, microphone MIC 480, built-in loudspeaker and connection ports for up to three call buttons



ET 970HR

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

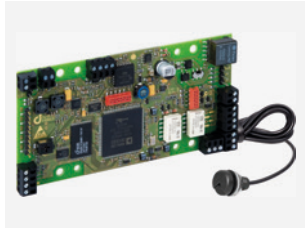


INTERCOM MODULES



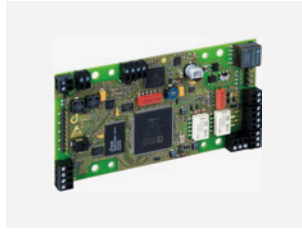
ET 811A

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 casing, built-in microphone, loudspeaker and connection ports for a keypad, or up to 12 call buttons



ET 870A

Intercom Module with polycarbonate casing, microphone MIC 480, and connections ports for an external loudspeaker and keypad or up to 12 call buttons



ET 871A

Intercom Module with polycarbonate casing, microphone MIC 480, loudspeaker and connection ports for a keypad, or up to 12 call 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



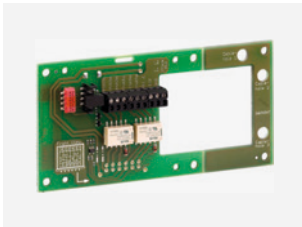
ET 8E8A-IP

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



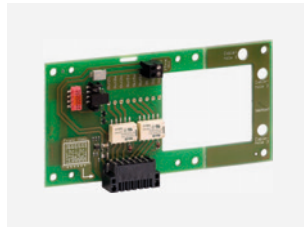
ET 8E8A

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



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



AUDIO INDUCTION LOOP AMPLIFIER



AFIL

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



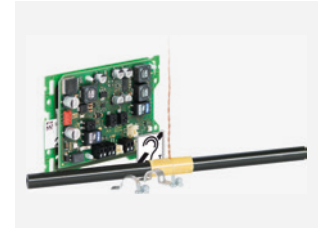
AFIL EB

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



AFIL-USB

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



WSEB IL

Audio Induction Loop Extension Kit for transmission of Intercom audio signals to hearing aids; suitable for Series WS Intercom Stations

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



DOOR STATION MODULES - SERIES ET 661



ET 661WE

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

ET 661SI

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

ET 661DG

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

ET 661AG

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



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

License for 1 ComWIN Visualisation Client and 100 data points



E-WIN-CPF

License for 1 ComWIN Visualisation Client



E-WIN-DP5-SPD

License for 500 ComWIN data points



E-VID-CPF

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



E-RPT-CPF

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



E-REC-CPF

License for 1 ComREC Client for audio stream recording



L-IP-REC1

License for 1 IP/RPT recording channel for call recording



E-SCH-CPF

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

STUDIO MODULE - COMWIN WEB CLIENT

The ComWIN Web Client is a limited version of the ComWIN Native Client. No installation required – all you need is a regular network connection and a browser. Web Clients share the licenses of the visualisation clients.

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

License for 1 Studio Backup Server for redundant systems

E-WIN-BKD5-SPD

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

STUDIO INTERFACES - VIDEO MANAGEMENT SYSTEMS



E-VID-MST-SPD

License for integration of Milestone XProtect into the Studio environment



E-VID-NUUO-SPD

License for integration of NUUO into the Studio environment



E-VID-SAMS-SPD

License for integration of Wisenet Samsung into the Studio environment



E-VID-SEE-SPD

License for integration of SeeTec into the Studio environment



E-VID-VDG-SPD

License for integration of VDG Sense into the Studio environment



STUDIO INTERFACES - PARKING MANAGEMENT SYSTEMS



E-WIN-DES-SPD

License for integration of Designa systems into the Studio environment



E-WIN-SBA-SPD

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



E-WIN-SKI-SPD

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



STUDIO INTERFACES - FIRE ALARM SYSTEMS

HEKATRON
Brandschutz

E-WIN-SHP-SPD

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

STUDIO INTERFACES - TELEPHONE SYSTEMS



E-WIN-TAPI-SPD

License for TAPI integration of telephone systems into the Studio environment

STUDIO INTERFACES - NETWORK AND DATA SYSTEMS



E-WIN-SNMP-SPD

License for integration of SNMP into the Studio environment

E-WIN-FIL-SPD

License for integration of file monitoring into the Studio environment

STUDIO INTERFACES - BUILDING MANAGEMENT SYSTEMS



E-WIN-OPC-SPD

License for integration of OPC into the Studio environment

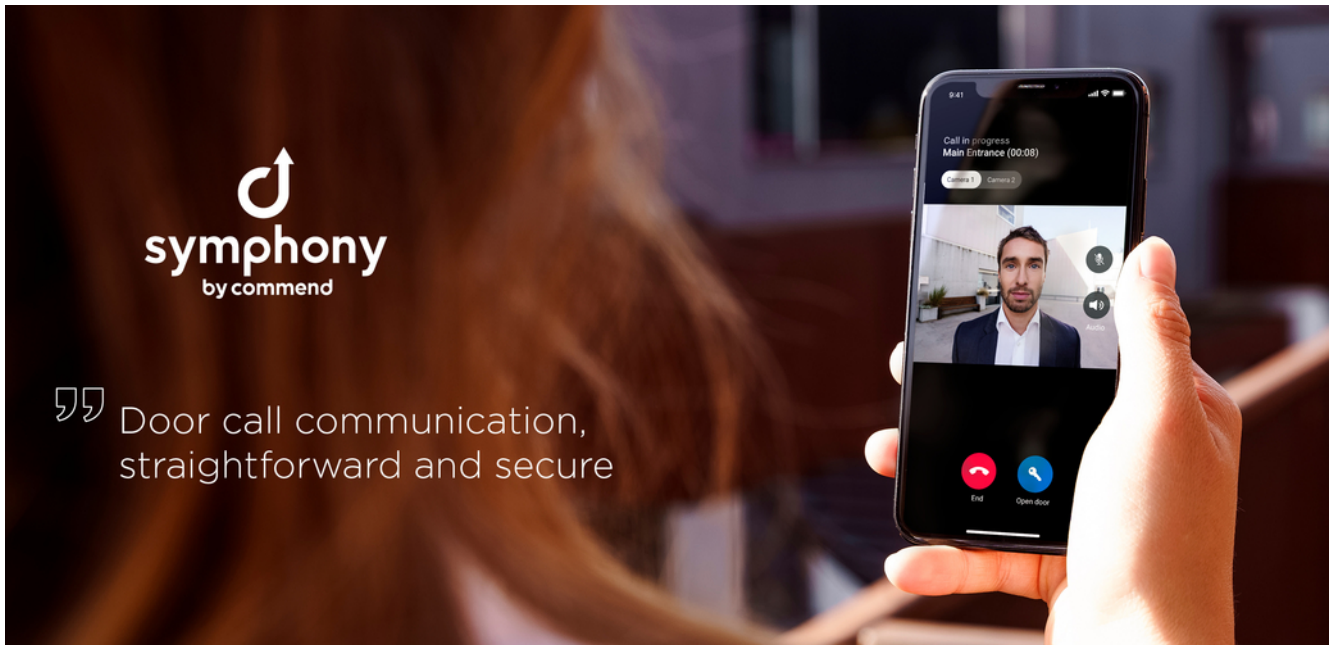
STUDIO INTERFACES - SDK



E-SDK-SPF

License for 1 ComSDK Server connection (Software Development Kit)

SYMPHONY MOBILE CLIENT



Commend's Symphony Mobile Client is a Symphony service for multi-tenant real-estate objects from business parks to modern residential complexes. The Symphony Mobile Client simplifies everyday tasks for tenants 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:

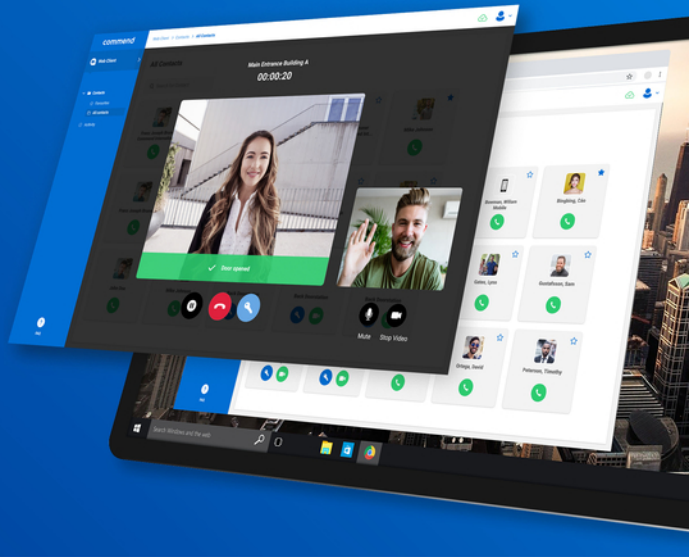
- Convenient answering of door calls via smartphone and opening doors
- Direct access to preferred contacts via Favourites on the home screen
- Bi-directional video calls
- Quick access to functions, either directly in the push notification or via widget functions
- Central call history with snapshots of visitors who have left – even for calls received while the smartphone is offline
- Easy tenant management using app or web browser
- No need for manual replacement of name labels on door bell name plates
- New tenants can be added easily via QR code
- 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:

- Calls can be answered and made conveniently within the web browser
- Worldwide access via login at <https://commend.services>
- Independent of the device type: suitable for desktops, laptops and mobiles
- Independent of the operating system used: supports Windows, macOS and Linux
- Display of a video feed during calls
- Control of signal outputs, e.g. for door openers, gates and barriers
- Call centre functions, such as call waiting, call forwarding or call switching

Learn more about Symphony:
symphony.commend.com

INTERCOM CLIENT FOR WINDOWS



Not all Intercom stations have to be hardware-based. Often a software solution will do just as well – or even better. At call centres, in embedded solutions or small-sized businesses, for example. The Intercom Client for Windows allows you to turn any regular PC, terminal or industrial PC into a professional Intercom station. What is more, the Intercom Client is fully customisable to individual preferences and requirements. With the Intercom Client for Windows you've always got the right tool for any communication job. Now and in the future.

KEY FEATURES:

- Intercom Client, video monitor and direct dialling buttons follow the hardware design of classical Commend desktop stations.
- The Intercom Client integrates smoothly into existing infrastructures of Commend software components and Commend devices.
- Individually customisable user interface layout: Use the Client with its ergonomic default layout or set up your own custom layout to suit your individual needs.
- Full integration of almost any Intercom function, and access to external data links on a common, uniform platform
- Supports various applications, from on-demand dial-up links via your notebook to extensions for Control Desks
- Extended video module for basic surveillance tasks

BASIC LICENSES



L-ICCAA1

Licence for 1 Intercom Client for Windows with audio functionality

L-ICCAA1-4

Licence for 4 Intercom Clients for Windows with audio functionality

L-ICCAA1-8

Licence for 8 Intercom Clients for Windows with audio functionality

NON-AUDIO LICENSES



L-ICCNA1

Licence for 1 Intercom Client for Windows without audio functionality

L-ICCNA1-4

Licence for 4 Intercom Clients for Windows without audio functionality

L-ICCNA1-8

Licence for 8 Intercom Clients for Windows without audio functionality

LICENSES FOR DIRECT DIALLING BUTTONS



L-ICCDDA

Licence for 1 direct dialling button module with 12 buttons

L-ICCDDA-4

Licence for 4 direct dialling button modules with 12 buttons each

L-ICCDDA-8

Licence for 8 direct dialling button modules with 12 buttons each

VIDEO LICENCES



L-ICCVA

Licence for 1 video module for Intercom Client for Windows

L-ICCVA-4

Licence for 4 video modules for Intercom Client for Windows

L-ICCVA-8

Licence for 8 video modules for Intercom Client for Windows

NETWORK-COMPATIBLE LOUDSPEAKERS



Simple
and reliable

A wide range of innovative functions sets the network-compatible Commend IP 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:

- Loudspeaker 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



^{dB}
118



AFLS 10H PW

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



^{dB}
101



AFLS 10H CW

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



^{dB}
105



AFLS 10H SCW

Surface-Mounted IP Loudspeaker with built-in Intercom module - RAL 9010



^{dB}
102

NETWORK COMPATIBLE 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
AF 20 EB	130 × 82 × 16

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



AF 500H

500 Watt Amplifier in metal housing, 1 HU



AF 250H

250 Watt Amplifier in metal housing, 1 HU



AF 125H

125 Watt Amplifier in metal housing, 1 HU



POWER AMPLIFIERS – SERIES AF 50



AF 50H

50 Watt Amplifier in polycarbonate housing, 1 HU



AF 50D

50 Watt Amplifier in polycarbonate housing, 1 HU



POWER AMPLIFIERS – SERIES AF 20



AF 20H

20 Watt Amplifier in polycarbonate housing



AF 20D

20 Watt Amplifier in polycarbonate housing



AF 20A EB

20 Watt Amplifier module without housing



POWER AMPLIFIERS - LICENSES



L-AF-LM

License for loudspeaker line monitoring for Series AF 50, AF 125, AF 250 and AF 500 digital and IP-based power amplifiers

ACCESSORIES



PA60W24V

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



ET 901-HSH35

Mounting bracket for fastening an AF 20 Power Amplifier, an ET 901 IP Converter and IP-BRIDGE to a top-hat rail in a switch box



PF-RM-1HE

19" rack mounting kit for one or two amplifier AF 50 side-by-side or for rack mounting one AF 125, AF 250 and AF 500 amplifier - Height: 1U



PF-WM

Wallmount and Desktop Kit for AF 50, AF 125, AF 250 and AF 500 amplifier

IEC CABLE C13



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

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

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

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,
100 V - RAL 7035

CLS 15 HG8

15 Watt Horn Loudspeaker,
8 Ω - RAL 7035

IP66 IK10 120^{dB}

HORN LOUDSPEAKERS - SERIES CLS 20 HG



CLS 20 HG

20 Watt Horn Loudspeaker,
100 V - RAL 7035

CLS 20 HG70V

20 Watt Horn Loudspeaker,
70 V - RAL 7035

CLS 20 HG8

15 Watt Horn Loudspeaker,
8 Ω - RAL 7035

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

101^{dB}

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

101^{dB}

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

101^{dB}

SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS HG



CLS 6 RCW

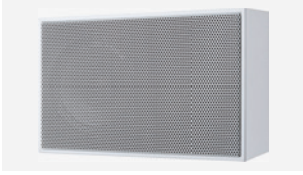
6 Watt Surface-Mounted Loudspeaker, 100 V - RAL 9010

CLS 6 RCW70V

6 Watt Surface-Mounted Loudspeaker, 70 V - RAL 9010

101^{dB}

SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS SCW



CLS 6 SCW

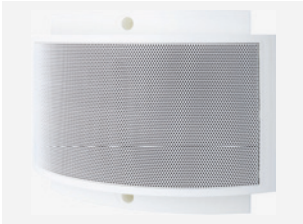
6 Watt Surface-Mounted Loudspeaker, 100 V - RAL 9010

CLS 6 SCW70V

6 Watt Surface-Mounted Loudspeaker, 70 V - RAL 9010

101^{dB}

SURFACE-MOUNTED LOUDSPEAKERS - SERIES CLS CCW



CLS 6 CCW

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

CLS 6 CCW70V

6 Watt Surface-Mounted Loudspeaker, 70 V - RAL 9010

101^{dB}

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 SIP Stations 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, GE 300 and IS 300
- IP interfaces: ICX via IP, RTP/SRTP, IoIP®, SIP/SIPS
- Convenient configuration via PC software CCT

VMware

Microsoft

Nutanix

BASIC LICENSES - VIRTUOSIS



L-SIS-PRO

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

SIS32-PRO

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



UPGRADE LICENCES - VIRTUOSIS



L-SIS32-UPG

License for Upgrade of VirtuoSIS Starter to VirtuoSIS Professional

L-UG-1D

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

L-UG-8B

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

IP SUBSCRIBER LICENSES - VIRTUOSIS



L-SIS-IP-2B

License for 2 subscriber units, feature level B

L-SIS-IP-8B

License for 8 subscribers, feature level B

L-SIS-IP-32B

License for 32 subscriber units, feature level B

L-SIS-IP-2D

License for 32 subscriber units, feature level B

L-SIS-IP-8D

License for 8 subscriber units, feature level D



SIP SUBSCRIBER LICENSES - VIRTUOSIS



L-SIS-SIP-8A

License for 8 SIP subscriber units, feature level A

L-SIS-SIP-2B

License for 2 SIP subscriber units, feature level B

L-SIS-SIP-8B

License for 8 SIP subscriber units, feature level B

L-SIS-SIP-2D

License for 2 SIP subscriber units, feature level D

L-SIS-SIP-8D

License for 8 SIP subscriber units, feature level D



SIP TRUNK LICENSES - VIRTUOSIS



L-SIS-SIPT8B

License for SIP Trunk, 8 Channels, feature level B

L-SIS-SIPT1D

License for SIP Trunk, 1 channel, feature level D

L-SIS-SIPT8D

License for SIP Trunk, 8 Channels, feature level D



NETWORK LICENSES - VIRTUOSIS



L-SIS-LAN-4

License for 4 LAN connections

L-SIS-LAN-8

License for 8 LAN connections

L-SIS-WAN-8

License for 8 WAN connections

L-SIS-MI

License for more than 2 network interfaces

UPGRADE SUBSCRIPTION - VIRTUOSIS



E-SIS-USUB1

1 Year Upgrade Subscription for VirtuoSIS

E-SIS-USUB3

3 Year Upgrade Subscription for VirtuoSIS

E-SIS-USUB5

5 Year Upgrade Subscription for VirtuoSIS

INTERFACE LICENSES - VIRTUOSIS



L-SIS-ICX

License for 1 ICX Interface

L-SYM-BRIDGE

License for Cloud Connection via Symphony Bridge

INTERCOM SERVERS - S SERIES



” Die ultimative 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

483 × 43 × 572

S3

250 × 191 × 52



max. Subscriber

S6: IP

448

S3: IP

112

BASIC CASING - 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 licenses, see VirtuoSIS Software Intercom Server

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: 1.8 m (IEC cable KAB-C7 not included)

IEC CABLE C7



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



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

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

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

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

BASIC CASING - 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, suitable for 19" racks, with 14 free plug-in slots in euroboard format, including UL certified power supply

GE 800EU

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



SERVER LICENSES - GE 800



L8-PRO6U

License for PRO 800 Upgrade to Version 6.x

C-L8-ICX

License for 1 ICX Interface

L8-NETLAN4

License for 4 LAN connections

L8-NETLAN8

License for 8 LAN connections

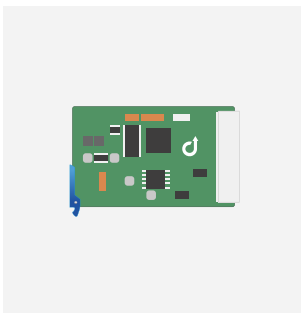
L8-NETWAN4

License for 4 WAN connections

L8-NETWAN8

License 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-32-2D

Upgrade License for 4 subscriber units, feature level D

L8-IP-32-32B

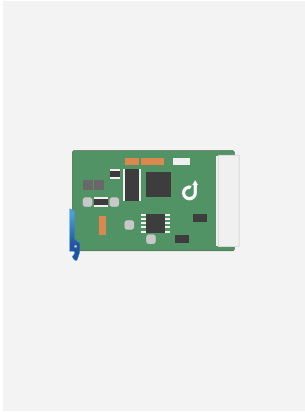
Upgrade License for 62 subscriber units, feature level B; for 2 subscriber units, feature level D

L8-IP-32PRO6U

License for PRO 800 Upgrade to Version 6.x



SUBSCRIBER CARD - G8-IP



G8-IP-4B

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

L8-IP-8B

License for 8 subscribers, feature level B

L-IP-REC1

License for 1 IP/RPT recording channel for call recording

L8-IP-4D

License for 4 subscriber units, feature level D

L8-IP-8D

License for 8 subscriber units, feature level D

L8-IP-4P

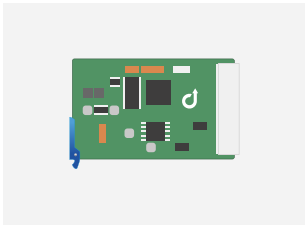
License for 4 subscriber units, feature level P

L8-IP-8P

License for 8 subscriber units, feature level P



SUBSCRIBER CARD - G8-GED



G8-GED-4B

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

L8-GED-4D

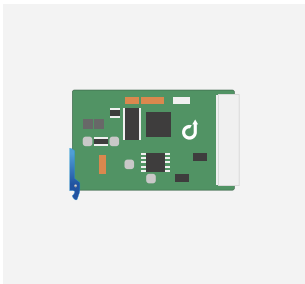
License for 4 subscriber units, feature level D

L8-GED-4P

License for 4 subscriber units, feature level P



SUBSCRIBER CARD - G8-GET



G8-GET-4B

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

L8-GET-4D

License for 4 subscriber units, feature level D

L8-GET-4P

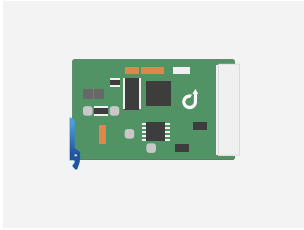
License for 4 subscriber units, feature level P

L8-GET-DSP

License for DSP features on G8-GET Subscriber Cards

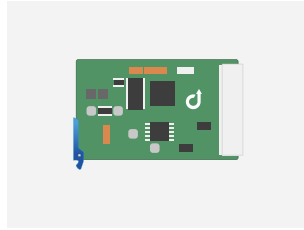


INPUT/OUTPUT CARDS - SERIES G8



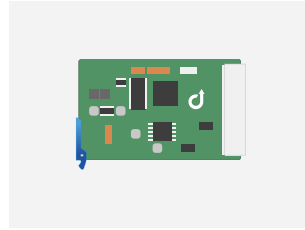
G8-16A

GE-800 Plug-in Card with 16 relay outputs



G8-16E

GE-800 Plug-in Card with 16 inputs

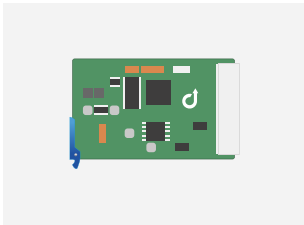


G8-8E8A

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



INTERFACE CARD - G8-IF



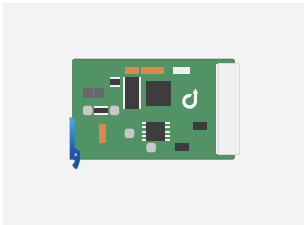
G8-IF

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

L8-IF-ICX

License for one additional ICX Interface (maximum is 6)

INTERFACE CARD - G8-AUD



G8-AUD-4B

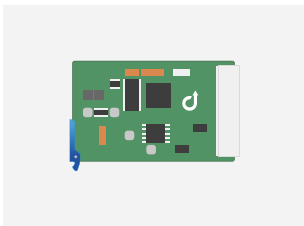
GE-800 Audio Interface Card with 4 channels, feature level B

L8-AUD-4D

License for 4 Channels, feature level D



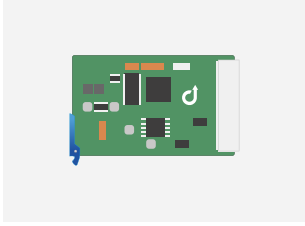
INTERFACE CARD - G8-TEL



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

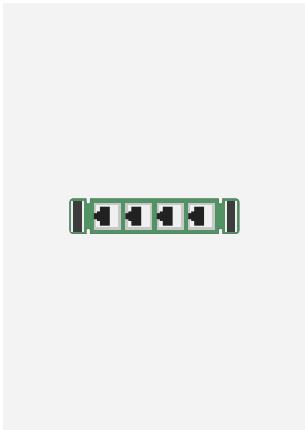
L8-LAN-16

License for 16 LAN connections

L8-WAN-8

License 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-Submini 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-Submini 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

ACCESSORIES



PA7-230VEU

EU Transformer, input: 230 VAC, with cable and EU plug; cable length: 1.1 m, output: 22.2 VAC, open cable tails; cable length: 2.5 m



PA7-240VUK

EU Transformer, input: 240 VAC, with cable and EU plug; cable length: 1.1 m, output: 22.2 VAC, open cable tails; cable length: 2.5 m

CONNECTION CABLE ASK 32



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

ASK 32-10

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

ASK 32-20

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

BASIC CASING – GE 300



GE 300

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

GE 300WR

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

GE 300EU

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

GE 300CA

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



SERVER LICENSES – GE 300



L3-ICX

License for 1 ICX Interface

L3-LAN-4

License for 4 LAN connections

L3-PRO6U

License for PRO 800 Upgrade to Version 6.x

EXPANSION CASINGS – GEZ 300 | GEI 300



GEZ 300

Expansion casing with 5 free plug-in slots in euroboard format, without power supply unit

GEZ 300UK

Expansion casing with 5 free plug-in slots in euroboard format, including power supply unit (UK)

GEZ 300AU

Expansion casing with 5 free plug-in slots in euroboard format, including power supply unit (Australia)

GEZ 300US

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

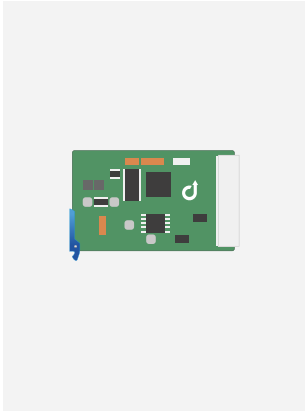
GEZ 300EU

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

GEI 300

Expansion casing with 2 free plug-in slots in euroboard format for G8 Interface Cards

SUBSCRIBER CARD - G3-IP



G3-IP-4B

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

L3-IP-8B

License for 8 subscribers, feature level B

L-IP-REC1

License for 1 IP/RPT recording channel for call recording

L3-IP-4D

License for 4 subscriber units, feature level D

L3-IP-8D

License for 8 subscriber units, feature level D

L3-IP-4P

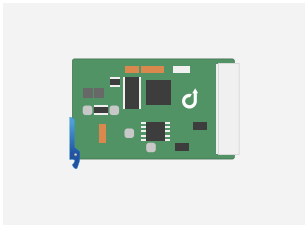
License for 4 subscriber units, feature level P

L3-IP-8P

License for 8 subscriber units, feature level P



SUBSCRIBER CARD - G3-GED



G3-GED-4B

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

L3-GED-4D

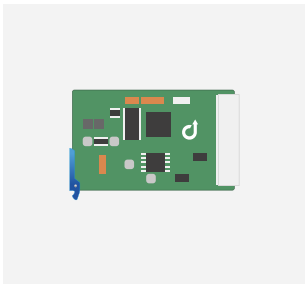
License for 4 subscriber units, feature level D

L3-GED-4P

License for 4 subscriber units, feature level P



SUBSCRIBER CARD - G3-GET



G3-GET-4B

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

L3-GET-DSP

License for DSP features on G3-GET Subscriber Cards

L3-GET-4D

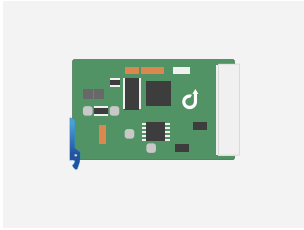
License for 4 subscriber units, feature level D

L3-GET-4P

License for 4 subscriber units, feature level P



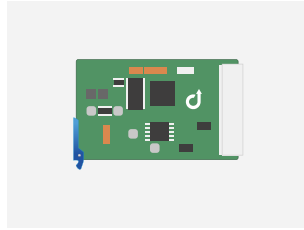
INPUT/OUTPUT CARDS - SERIES G3



G3-16A

GE-300 Plug-in Card with 16 relay outputs

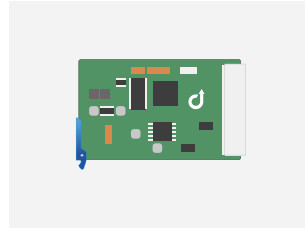
16 ↗



G3-16E

GE-300 Plug-in Card with 16 inputs

16 ↗

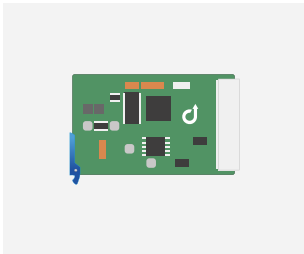


G3-8E8A

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

8 ↗ 8 ↗

NETWORKING CARD - G3-LAN



G3-LAN-8

GE-300 Network Card for 8 LAN connections

L3-WAN-8

License for 8 WAN connections

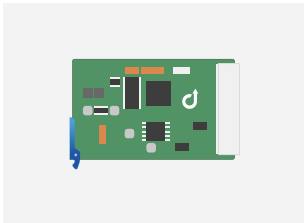
L3-LAN-16

License for 16 LAN connections

L3-WAN-4

License for 4 WAN connections

INTERFACE CARD - G3-IF



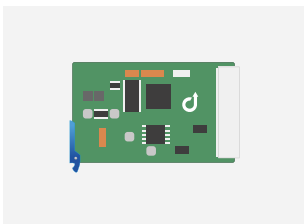
G3-IF

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

L3-IF-ICX

License for one additional ICX Interface (maximum is 6)

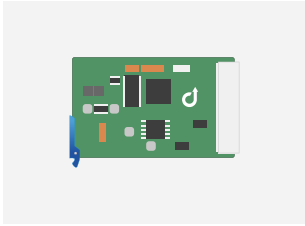
INTERFACE CARD G3-TEL



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

License 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: 1.5 m (IEC cable KAB-C13 not included)

IEC CABLE C13



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

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

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

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

ACCESSORIES



IP CONVERTER



IP Converter Box with integrated switch for connecting digital Intercom Stations



IP Converter Box with integrated switch for connecting analogue Intercom Stations



IP Converter add-in card with integrated switch for connecting digital Intercom Stations



IP Converter add-in card with integrated switch for connecting analogue Intercom Stations



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 800SW

Cardioid gooseneck microphone for connection via RJ10 Western plug

MIC 800SWJ

Cardioid gooseneck microphone for connection via 3.5 mm jack plug

MIC 473SW

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 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

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

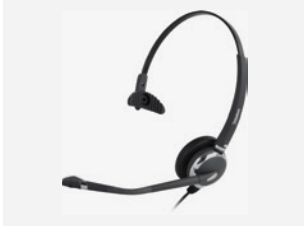
MICROPHONE WIND GUARD - WINDBRUSH



WIND MIC480

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 12 VDC (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)

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 1.5 m 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: 1.5 m (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

TRANSFORMERS



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



PA7-230VEU

EU Transformer, input: 230 VAC, with cable and EU plug; cable length: 1.1 m, output: 22.2 VAC, open cable tails; cable length: 2.5 m



PA7-240VUK

EU Transformer, input: 240 VAC, with cable and EU plug; cable length: 1.1 m, output: 22.2 VAC, open cable tails; cable length: 2.5 m

IEC CABLE C7



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

KAB-C7-US

IEC cable C7, version for USA; 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

IEC CABLE C13



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

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

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

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

CONNECTION CABLE ASK 32



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

ASK 32-10

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

ASK 32-20

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: 0.3 m

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 LICENSES



OPC-100-SPD

Licence for 100 Intercom Objects

OPC-1000-SPD

Licence for 1000 Intercom Objects

COMPLC INTERFACE DESIGNER



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 96), for Studio interfaces see Studio by Commend (See Page 79).

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 IEC 62262



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 optimum 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 protection ratings are indicated as follows:



	First Numeral	Second Numeral
0	(not used)	(not used)
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

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 protection ratings are indicated as follows:



	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

PRODUCT INDEX

Code	Page	Code	Page	Code	Page	Code	Page
AF 125H.....	90	CLS 6 SCW.....	95	EE 320AG.....	38	EE 872AS.....	49
AF 20A EB.....	90	CLS 6 SCW70V.....	95	EE 320AR.....	38	EE 8999M.....	58
AF 20D.....	90	CM1.....	74	EE 320AS.....	38	EE 8999MSOS.....	58
AF 20H.....	90	E-REC-CPF.....	80	EE 372AS.....	50	EE 8999S.....	58
AF 250H.....	90	E-RPT-CPF.....	80	EE 380AAS.....	71	EE 900AS.....	49
AF 500H.....	90	E-SCH-CPF.....	80	EE 380ABEG.....	71	EE 972AS.....	49
AF 50D.....	90	E-SDK-SPF.....	82	EE 380ACS.....	71	EE 980.....	70
AF 50H.....	90	E-SIS-USUB1.....	98	EE 380ADEGS.....	71	EE 980 CM.....	70
AFIL.....	78	E-SIS-USUB3.....	98	EE 400G.....	51	EE DK9.....	70
AFIL EB.....	78	E-SIS-USUB5.....	98	EE 400S.....	51	EE HS9.....	70
AFIL-USB.....	30,45,74,78	E-ST-BK-SPD.....	80	EE 401G.....	50	EE SH9.....	70
AFLS 10H CW.....	88	E-ST-USUB1.....	80	EE 401S.....	50	EE-HS3.....	71
AFLS 10H HG.....	88	E-ST-USUB3.....	80	EE 411G.....	50	EF 031-1.....	67
AFLS 10H PW.....	88	E-ST-USUB5.....	80	EE 411S.....	50	EF 031-2.....	67
AFLS 10H SCW.....	88	E-VID-CPF.....	80	EE 420G.....	38	EF 031-2MR.....	67
AL 10-16S.....	53	E-VID-MST-SPD.....	81	EE 420S.....	38	EF 031-2R.....	67
AL 10-16W.....	53	E-VID-NUUO-SPD.....	81	EE 472G.....	51	EF 311AS.....	50
ASK 32-10.....	107,117	E-VID-SAMS-SPD.....	81	EE 472S.....	51	EF 401G.....	51
ASK 32-20.....	107,117	E-VID-SEE-SPD.....	81	EE 7008D AC.....	56	EF 401S.....	51
ASKKAT5-3S.....	49,70,118	E-VID-VDG-SPD.....	81	EE 7008D AC S.....	56	EF 62G.....	47
C-L8-ICX.....	103	E-WIN-BASE-SPD.....	80	EE 7008D AC S H.....	56	EF 62NIRO.....	47
CD 800P I.....	69	E-WIN-BKD5-SPD.....	80	EE 7008D DC.....	56	EF 62O.....	47
CD 810P I.....	69	E-WIN-CPF.....	80	EE 7008D DC H.....	56	EF 862A.....	41
CDDD 32P.....	69	E-WIN-DES-SPD.....	81	EE 7008D DC S.....	56	EF 862AM.....	44
CDDK.....	69	E-WIN-DP5-SPD.....	80	EE 7008D DC S H.....	56	EF 962H.....	41
CDHD 50P.....	69	E-WIN-FIL-SPD.....	82	EE 708D AC H.....	56	EF 962HM.....	44
CDHS 50P.....	69	E-WIN-OPC-SPD.....	82	EE 7504D AC.....	55	EM 302EGS.....	71
CDMI 50P HD.....	69	E-WIN-SBA-SPD.....	81	EE 7504D AC H.....	55	EM 302S.....	71
CLS 10 HG.....	93	E-WIN-SHP-SPD.....	82	EE 7504D AC S.....	55	EM 600.....	59
CLS 10 HG70V.....	93	E-WIN-SKI-SPD.....	81	EE 7504D AC S H.....	55	EM 602.....	59
CLS 15 HG.....	93	E-WIN-SNMP-SPD.....	82	EE 7504D DC.....	55	EM 603.....	59
CLS 15 HG8.....	93	E-WIN-TAPI-SPD.....	82	EE 7504D DC H.....	55	EM 605.....	59
CLS 20 HG.....	93	EB 330.....	66	EE 7504D DC S.....	55	EM 606.....	59
CLS 20 HG70V.....	93	EB 330A.....	66	EE 7504D DC S H.....	55	EM 650.....	59
CLS 20 HG8.....	93	EB 330AH.....	66	EE 7P04D AC.....	57	EM 660.....	59
CLS 30 HG.....	93	EB 330AHS.....	66	EE 7P04D AC H.....	57	EM 680.....	59
CLS 30 HG70V.....	93	EB 330S.....	66	EE 7P04D AC S.....	57	EM 681.....	59
CLS 6 CCW.....	95	EB1E1A.....	30,45,74,77	EE 7P04D AC S H.....	57	EM 6A0.....	59
CLS 6 CCW70V.....	95	EB2E2A.....	77	EE 7P04D DC.....	57	EM 6B0.....	59
CLS 6 CEBW.....	94	EB2E2AHE.....	77	EE 7P04D DC H.....	57	EM 6CA.....	59
CLS 6 CEBW70V.....	94	EB3E2A-AUD.....	30,45,74,77	EE 7P04D DC S.....	57	ET 661AG.....	78
CLS 6 CIBW.....	94	EB8E4A.....	77	EE 7P04D DC S H.....	57	ET 661DG.....	78
CLS 6 CIBW70V.....	94	EB8E8A.....	30,45,74,77	EE 8108M.....	58	ET 661SI.....	78
CLS 6 PW.....	94	EE 301AG.....	50	EE 811A.....	49	ET 661WE.....	78
CLS 6 PW70V.....	94	EE 301AS.....	50	EE 8158M.....	58	ET 808A.....	76
CLS 6 RCW.....	94	EE 311AG.....	50	EE 81ADMSOS.....	58	ET 808AME.....	76
CLS 6 RCW70V.....	94	EE 311AS.....	50	EE 872AEGS.....	49	ET 811A.....	76

Code	Page	Code	Page	Code	Page	Code	Page
ET 861AAG.....	78	EX 7504D 2 AC S H.....	62	GE 300.....	109	L-ICCN1-4.....	86
ET 861ADG.....	78	EX 7504D 2 DC.....	62	GE 300CA.....	109	L-ICCN1-8.....	86
ET 861ASI.....	78	EX 7504D 2 DC H.....	62	GE 300EU.....	109	L-ICCV.....	86
ET 861AWE.....	78	EX 7504D 2 DC S.....	62	GE 300WR.....	109	L-ICCV-4.....	86
ET 862A.....	76	EX 7504D 2 DC S H.....	62	GE 800.....	103	L-ICCV-8.....	86
ET 870A.....	76	EX 7P04D 1 AC.....	63	GE 800AU.....	103	L-IP-REC1.....	80,104,110
ET 871A.....	76	EX 7P04D 1 AC H.....	63	GE 800EU.....	103	L-PLC-200.....	123
ET 8E8A.....	77	EX 7P04D 1 AC S.....	63	GE 800UK.....	103	L-PLC-50.....	123
ET 8E8A-IP.....	77	EX 7P04D 1 AC S H.....	63	GE 800UL.....	103	L-PLC-AVIGIL.....	123
ET 901-HSH35.....	91	EX 7P04D 1 DC.....	63	GEC 480S.....	53	L-PLC-KNX.....	123
ET 908H.....	75	EX 7P04D 1 DC H.....	63	GEC 481S.....	53	L-PLC-MAIL.....	123
ET 908H-1.....	75	EX 7P04D 1 DC S.....	63	GEC 481S U.....	53	L-PLC-MODBUS.....	123
ET 908HMI.....	75	EX 7P04D 1 DC S H.....	63	GEC 881.....	52	L-PLC-SNMP.....	123
ET 908HMI-1.....	75	EX 7P04D 2 AC.....	63	GEC 882.....	52	L-PLC-WEBCOM.....	123
ET 962H.....	75	EX 7P04D 2 AC H.....	63	GEI 300.....	109	L-SIS-ICX.....	98
ET 962HR.....	75	EX 7P04D 2 AC S.....	63	GEZ 300.....	109	L-SIS-IP-2B.....	97
ET 970H.....	75	EX 7P04D 2 AC S H.....	63	GEZ 300AU.....	109	L-SIS-IP-2D.....	97
ET 970HR.....	75	EX 7P04D 2 DC.....	63	GEZ 300EU.....	109	L-SIS-IP-32B.....	97
EW 102.....	51	EX 7P04D 2 DC H.....	63	GEZ 300UK.....	109	L-SIS-IP-8B.....	97
EW 401G.....	51	EX 7P04D 2 DC S.....	63	GEZ 300US.....	109	L-SIS-IP-8D.....	97
EW 401S.....	51	EX 7P04D 2 DC S H.....	63	GUEF 62.....	47	L-SIS-LAN-4.....	98
EX 7008D 1 AC.....	61	G3-16A.....	111	GUEF 962.....	47	L-SIS-LAN-8.....	98
EX 7008D 1 AC H.....	61	G3-16E.....	111	HS 1.....	115	L-SIS-MI.....	98
EX 7008D 1 AC S.....	61	G3-8E8A.....	111	ID5 DK.....	30	L-SIS-PRO.....	97
EX 7008D 1 AC S H.....	61	G3-AUD-4B.....	112	ID5 DKAD.....	30	L-SIS-SIP-2B.....	97
EX 7008D 1 DC.....	61	G3-GED-4B.....	110	ID5 DKGM.....	29	L-SIS-SIP-2D.....	97
EX 7008D 1 DC H.....	61	G3-GET-4B.....	110	ID5 DKHS.....	29	L-SIS-SIP-8A.....	97
EX 7008D 1 DC S.....	61	G3-IF.....	111	ID5 DKHSGM.....	29	L-SIS-SIP-8B.....	97
EX 7008D 1 DC S H.....	61	G3-IP-4B.....	110	ID5 TD.....	28	L-SIS-SIP-8D.....	97
EX 7008D 2 AC.....	61	G3-LAN-8.....	111	ID5 TD CM.....	28	L-SIS-SIPTID.....	98
EX 7008D 2 AC H.....	61	G3-TEL.....	111	ID5 WMHS.....	29	L-SIS-SIPT8B.....	98
EX 7008D 2 AC S.....	61	G8-16A.....	105	IM3.....	73	L-SIS-SIPT8D.....	98
EX 7008D 2 AC S H.....	61	G8-16E.....	105	IM6.....	73	L-SIS-WAN-8.....	98
EX 7008D 2 DC.....	61	G8-8E8A.....	105	IP-BRIDGE.....	30,45,74,113	L-SIS32-UPG.....	97
EX 7008D 2 DC H.....	61	G8-AUD-4B.....	105	IP-CON.....	30,45,74,77	L-SYM-BRIDGE.....	98
EX 7008D 2 DC S.....	61	G8-GED-4B.....	104	KAB-C7-EU.....	101,117	L-UG-1D.....	97
EX 7008D 2 DC S H.....	61	G8-GET-4B.....	104	KAB-C7-UK.....	101,117	L-UG-8B.....	97
EX 7504D 1 AC.....	62	G8-IF.....	105	KAB-C7-US.....	101,117	L3-AUD-4D.....	112
EX 7504D 1 AC H.....	62	G8-IP-32.....	103	KAB-HS1-RJ.....	115	L3-GED-4D.....	110
EX 7504D 1 AC S.....	62	G8-IP-4B.....	104	L-AF-LM.....	91	L3-GED-4P.....	110
EX 7504D 1 AC S H.....	62	G8-LAN-8.....	106	L-EX-AF-OUT.....	57,64	L3-GET-4D.....	110
EX 7504D 1 DC.....	62	G8-TEL.....	105	L-ICCAA1.....	86	L3-GET-4P.....	110
EX 7504D 1 DC H.....	62	G8A-C.....	106	L-ICCAA1-4.....	86	L3-GET-DSP.....	110
EX 7504D 1 DC S.....	62	G8A-CP.....	106	L-ICCAA1-8.....	86	L3-ICX.....	109
EX 7504D 1 DC S H.....	62	G8A-GEN2.....	106	L-ICCCDA.....	86	L3-IF-ICX.....	111
EX 7504D 2 AC.....	62	G8A-I.....	106	L-ICCCDA-4.....	86	L3-IP-4D.....	110
EX 7504D 2 AC H.....	62	G8A-K.....	106	L-ICCCDA-8.....	86	L3-IP-4P.....	110
EX 7504D 2 AC S.....	62	G8A-T.....	106	L-ICCN1.....	86	L3-IP-8B.....	110

Code	Page	Code	Page	Code	Page	Code	Page
L3-IP-8D.....	110	OPC-100-SPD.....	121	WS 203P D.....	33	WSIL 50P.....	34
L3-IP-8P.....	110	OPC-1000-SPD.....	121	WS 203P I.....	33	WSIL 50V.....	44
L3-LAN-16.....	111	PA1-230V.....	112,117	WS 203V D.....	40	WSLM 52F.....	36
L3-LAN-4.....	109	PA1-S3.....	101	WS 203V I.....	40	WSLM 52P.....	34
L3-PRO6U.....	109	PA15WPOE.....	49,70,115	WS 211V D.....	43	WSLM 52V.....	44
L3-WAN-4.....	111	PA24W15V-CA.....	51,71,116	WS 211V D DA.....	41	WSLM 56F.....	36
L3-WAN-8.....	111	PA24W30V-CA.....	71,116	WS 211V D M.....	43	WSLM 56P.....	34
L8-AUD-4D.....	105	PA24W30V-EU.....	71,116	WS 211V I.....	43	WSLM 56V.....	44
L8-GED-4D.....	104	PA25WPOE-DC.....	30,45,74,115	WS 211V I CA.....	43	WSRR 50V.....	47
L8-GED-4P.....	104	PA30W12V.....	116	WS 211V I DA.....	41	WSSH 50P.....	37
L8-GET-4D.....	104	PA30W15V.....	53,116	WS 211V I M.....	43	WSSH 50V OR.....	46
L8-GET-4P.....	104	PA30W24V-CA.....	69,112,116	WS 212V D.....	43	WSSH 50V OR EM.....	46
L8-GET-DSP.....	104	PA30W24V-EU.....	69,112,116	WS 212V I.....	43	WSSH 50V SS.....	46
L8-IF-ICX.....	105	PA60W24V.....	91,112,116	WS 301V CM.....	40	WSSH 50V WA.....	46
L8-IP-32-2D.....	103	PA65W48V.....	116	WS 303V CM.....	40	WSSH 50V YL EM.....	46
L8-IP-32-32B.....	103	PA7-230VEU.....	107,117	WS 311V CM.....	43	WSSH 52P.....	37
L8-IP-32PRO6U.....	103	PA7-240VUK.....	107,117	WS 311V CM DA.....	41	WSSH 54P.....	37
L8-IP-4D.....	104	PF-RM-1HE.....	91	WS 800F D.....	36	WSSK 50V FB.....	47
L8-IP-4P.....	104	PF-WM.....	91	WS 800F D MD.....	36	WSSK 50V SH.....	47
L8-IP-8B.....	104	POE-SPLIT.....	30,45,74,115	WS 800F I.....	36	WSTM 50P.....	34
L8-IP-8D.....	104	POE-SPLIT-M.....	30,45,74,115	WS 800P D.....	33	WSTM 50V.....	44
L8-IP-8P.....	104	RJ45-MONT.....	37,47,118	WS 800P I.....	33	XDX FB.....	31
L8-LAN-16.....	106	RM-S3-2RU.....	101	WS 800V D.....	41	XDX FBS.....	31
L8-NETLAN4.....	103	S3.....	100	WS 800V I.....	41	XDX SH.....	31
L8-NETLAN8.....	103	S6.....	100	WS 810F I.....	36	XDX SHE.....	31
L8-NETWAN4.....	103	SIP-EE 980.....	70	WS 810P I.....	33	XDX SHID.....	31
L8-NETWAN8.....	103	SIP-EE 980 CM.....	70	WSCP 50P SH.....	37	XDX SHMM.....	31
L8-PRO6U.....	103	SIP-WS 201P.....	33	WSDD 53V.....	44		
L8-WAN-8.....	106	SIP-WS 201V.....	40	WSDD 59V.....	44		
LSM.....	74	SIP-WS 203P.....	33	WSDK 50P.....	37		
MIC 473SW.....	114	SIP-WS 203V.....	40	WSDM P.....	37		
MIC 480.....	114	SIP-WS 211V.....	43	WSDU 50P.....	34		
MIC 480AJ.....	114	SIP-WS 211V DA.....	41	WSDU 52P.....	34		
MIC 480S-08.....	114	SIP-WS 212V.....	43	WSDU 52P AM.....	34		
MIC 480S-12.....	114	SIP-WS 800F.....	36	WSDU 52P TW.....	34		
MIC 800SW.....	114	SIP-WS 800F MD.....	36	WSDU 52V AM.....	44		
MIC 800SWJ.....	114	SIP-WS 800P.....	33	WSDU 52V TW.....	44		
MIC Q400.....	114	SIP-WS 800V.....	41	WSEB IL.....	34,78		
MIC Q400AJ.....	114	SIS32-PRO.....	97	WSEB RJ45.....	34		
OD1 CM.....	28	TAMP-KIT.....	31	WSFB 50P.....	37		
OD1 V CM.....	28	UP 030.....	67	WSFB 50V OR.....	46		
OD10 FB.....	31	WIND MIC480.....	114	WSFB 50V SS.....	46		
OD10 FBDUR.....	29	WS 201P D.....	33	WSFB 50V SS FL.....	46		
OD10 FBS.....	31	WS 201P I.....	33	WSFB 50V SS MC.....	46		
OD10 SH.....	31	WS 201P I CA.....	33	WSFB 52P.....	37		
OD10 TD CM.....	28	WS 201V D.....	40	WSFB 52V SS.....	46		
OD5 TD CM.....	28	WS 201V I.....	40	WSFB 52V SS MC.....	46		
ODX FBDUR.....	29	WS 201V I CA.....	40	WSHS 50P-JST.....	34		

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.

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.

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. As a result, Commend Intercom systems not only support the usual ‘talk-back’ and ‘push-to-talk’ modes but genuine ‘hands-free’ talking as in normal face-to-face conversations. OpenDuplex works under any acoustic conditions, even in case of a loud or sudden background noise.

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

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, fibre-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.

LEGAL INFORMATION

Commend International GmbH
Saalachstraße 51
5020 Salzburg, Austria

Tel. +43 662 856 225
Fax: +43 662 856 226
office@commend.com
commend.com

UID Nr. ATU46883403
DVR Nr. 0812935
FN 178618z

Certified as per
EN ISO 9001:2015 by BVQI
EN ISO 27001:2013 by CIS
IEC 62443-4-1 by TÜV SÜD

Commend is a registered trademark owned by Commend International GmbH.
All other products or company names mentioned on this web site are brands or registered trademarks
of their respective owners. Misprints, errors, technical changes as well as changes
in the availability of individual products are expressly excepted.

© Commend International GmbH, 2022



TRUSTED. COMMUNICATION. ALWAYS.

When every second counts, people need technology that does not just work, but is one hundred percent reliable - anywhere, anytime around the clock. At Commend, we are aware of our responsibility. That is because millions of people put their trust in us and our products every day. Whether at a London Underground station, a car park in France or a hospital in the United States; because every word counts, everything speaks in favour of solutions by Commend.

A STRONG NETWORK WORLDWIDE

23 sales organisations operating in more than 60 countries.
More than 500 employees worldwide.



Would you like to learn more about solutions by Commend? Please contact us.

QUALITY TESTED. RELIABLE. WELL-DESIGNED.

Commend products are developed and manufactured by Commend International in Salzburg, Austria. Development and manufacturing processes are certified in accordance with EN ISO 9001:2015 and EN ISO 27001:2013. Security by Design on all levels.

commend.com