ognios
by commend

COMMUNICATION SOLUTIONS FOR MARITIME APPLICATIONS

The first choice for on-board IP-Communication

TRUSTED. COMMUNICATION. ALWAYS.

CARGO VESSELS

OIL TANKERS

LNG CARRIERS

WORK BOATS

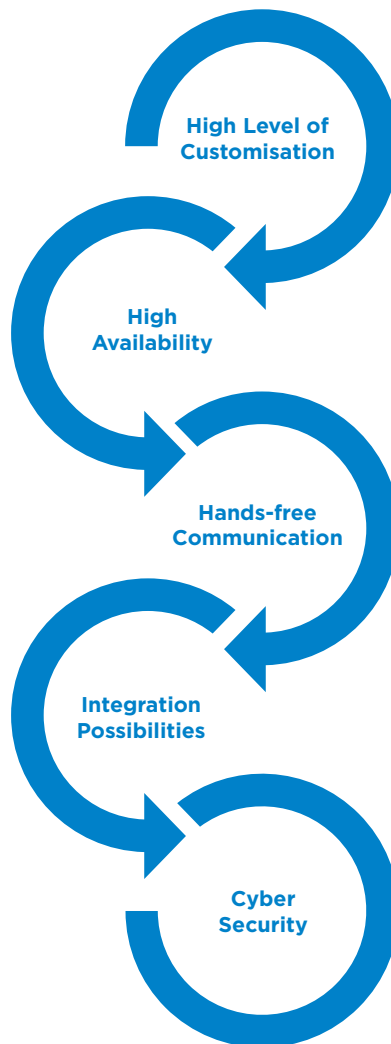**INLAND VESSELS**

FERRIES

RELIABLE ONBOARD COMMUNICATION AND INNOVATIVE INTERCOM SOLUTIONS

Ognios by Commend provides IP-based Intercom systems for the maritime market. Thereby the systems are developed and designed to withstand the harsh conditions at sea. The Ognios System focuses on the individual needs of our customers. Ognios Intercom Solutions combine the flexibility in function with the flexibility in design in order to meet your individual needs.

WHY OGNIOS?

... the flexibility in design makes sure that the system perfectly fits your requirements.

... ensures reliable onboard communication (maritime certified products).

ULTIMATE SPEECH INTELLIGIBILITY

Communication is complicated enough. That's why technical systems should offer solutions rather than pose additional problems. In order to ensure the best possible voice intelligibility, Ognios employs two digital microphones and state-of-the-art audio algorithms to eliminate background noise without losing essential acoustic content.

High Level of Customisation

High Availability

Hands-free Communication

Integration Possibilities

Cyber Security

... with high volume and speech intelligibility also in noisy surroundings.

... the flexibility in function allows the system to be connected and integrated into other systems (like PAGA, mobile radio, or control panel integration).

The encryption used when transmitting data ensures that the Ognios system is secured against manipulation attempts as well as data theft and is easy to maintain and use through the configuration

MARKET AND TECHNOLOGY LEADER ON SHORE TAKES OFF ON THE HIGH SEAS

1971
Founded in Austria

23
Subsidiaries & Partners worldwide

60+
Operating in more than 60 countries

250+
Employees at Commend International in Salzburg

550+
Employees worldwide

ISO 9001:2015
ISO 27001 / 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 products with an excellent ROI thanks to their long lifecycle.

Our production facilities in Salzburg (Austria) are the birthplace of the stuff that Intercom dreams are made of. Millions of electronic components are brought together to create products that satisfy our clients' demands and deliver excellent audio quality that makes their users prick up their ears.

CYBER SECURITY
A QUESTION OF TRUST

We are committed to providing our customers with products, systems and services that thoroughly address cyber security. At Commend we are working continuously to fortify our systems, products and solutions against cyberattacks and to provide multi-level protection for network-based services.

Commend International is ISO 27001 certified – Information Security Management.

Secure Product Development Lifecycle assessed and monitored according to IEC 62443-4-1.

Designed and developed according to the newest regulations of the IMO – MSC428(98)
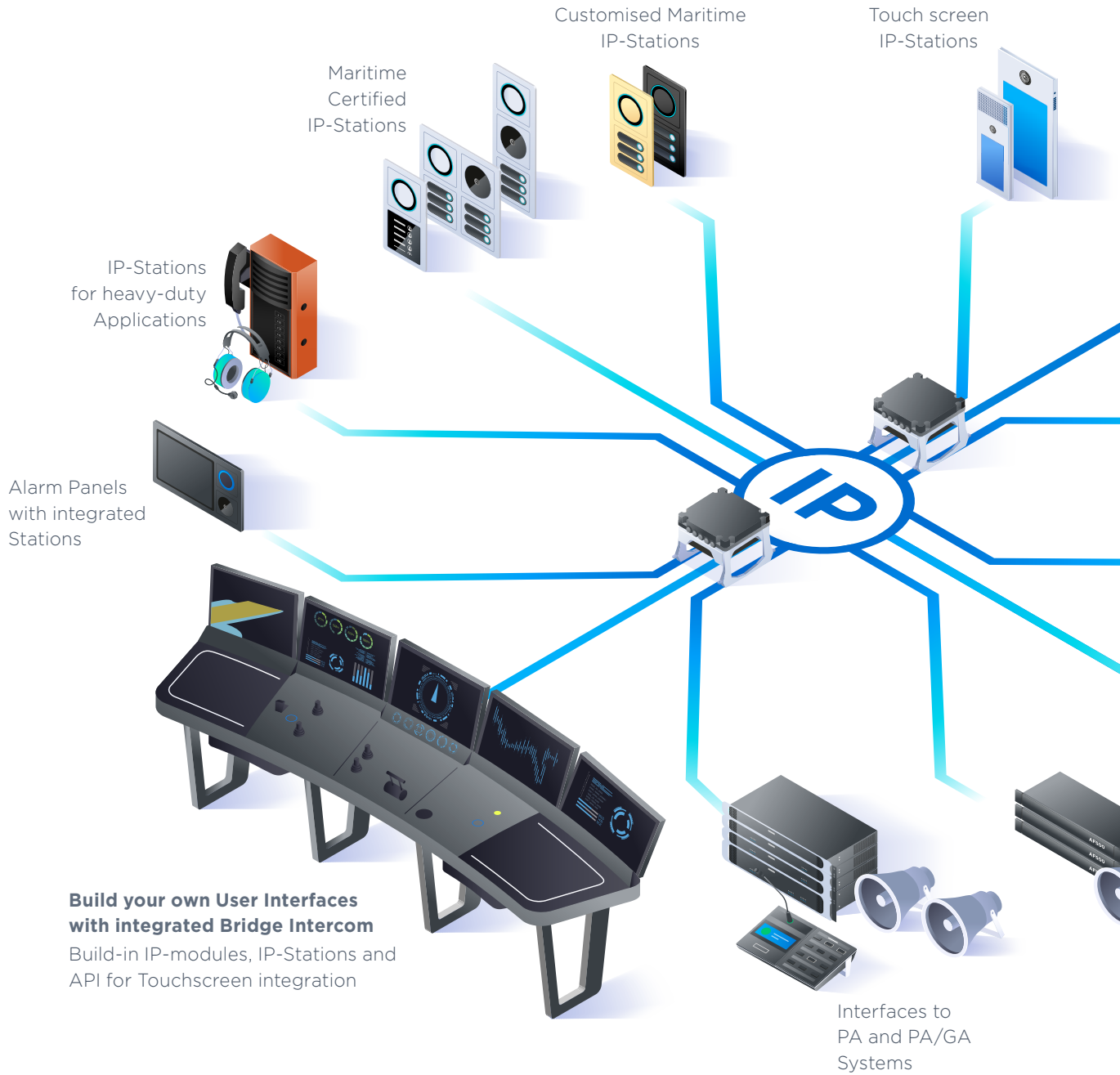
trust.commend.com

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.

AUSTRIA

OBS ESSIVE ABOUT QUAL ITY

ONE PLATFORM
MARITIME IP-COMMUNICATION

Customised Maritime
IP-Stations

Touch screen
IP-Stations

Maritime
Certified
IP-Stations

IP-Stations
for heavy-duty
Applications

Alarm Panels
with integrated
Stations

**Build your own User Interfaces
with integrated Bridge Intercom**
Build-in IP-modules, IP-Stations and
API for Touchscreen integration
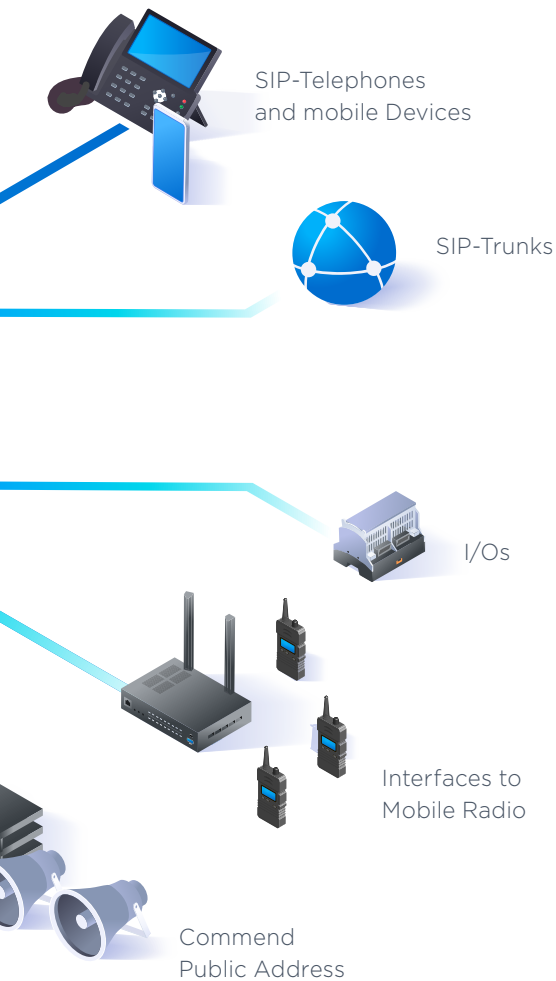
Interfaces to
PA and PA/GA
Systems

SECURING COMMUNICATION

The Ognios Server Client System has been developed to ensure secure onboard communication of any ship. Thus, not only server redundancy but also a redundant power supply (PoE and DC) are provided.

In case of an energy short-cut, communication via the Ognios Intercom System is still possible. Another feature that makes the system even more reliable is the redundant Server Client System which allows passengers and crew members to communicate via the Ognios Intercom System even if the primary server collapses.

INTEGRATIONS

BOSCH

SMC gateway

BÖNING SHIP AUTOMATION

bachmann.

SIP-Telephones and mobile Devices

SIP-Trunks

I/Os

Interfaces to Mobile Radio

Commend Public Address

PUBLIC ADDRESS

Extra high-volume capacity and voice speech quality enable users to inform their staff on site. Additional Intercom stations on their premises make two-way communication possible, which substantially enhances operational activities.
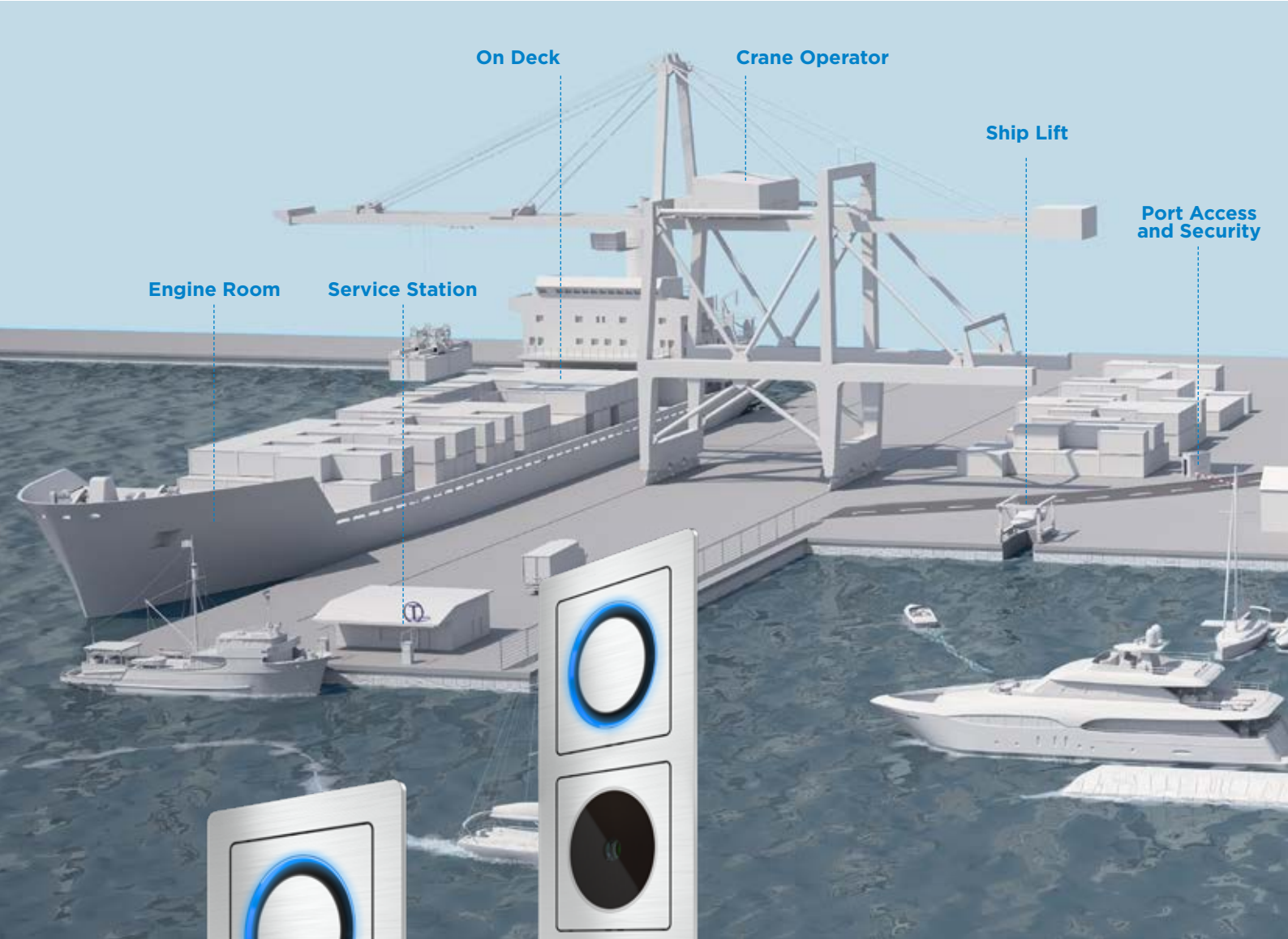
Choose from Commend PA solutions and integration options of PA and PA/GA systems from leading manufacturers like **PRAESENSA Public Address & Voice Alarm system from Bosch.**

– Space- and weight-saving with PRAESENSA's compact amplifiers and system controller

– Fail-safe public address and voice evacuation solutions with integrated redundancies

– Highest speech intelligibility based on interfacing with IP-based DANTE audio standard

– **Seamless integration of Ognios modules into the bridge as intercom and PA stations**

– Ognios uses standard SIP features for easy but secure audio connections and integration other on-board systems

SIP TRUNKS

On-board communication systems and the Ognios servers can be connected to other SIP-servers and also the public telephone network via SIP trunks.

On Deck

Crane Operator

Ship Lift

Port Access
and Security

Engine Room

Service Station

CREW

CAPTAIN

OGNIOS

Modular IP-Stations
Combination of different
sizes of Intercom stations
and different modules to
suit any requirements.

Integrated Bridge Intercom Solutions
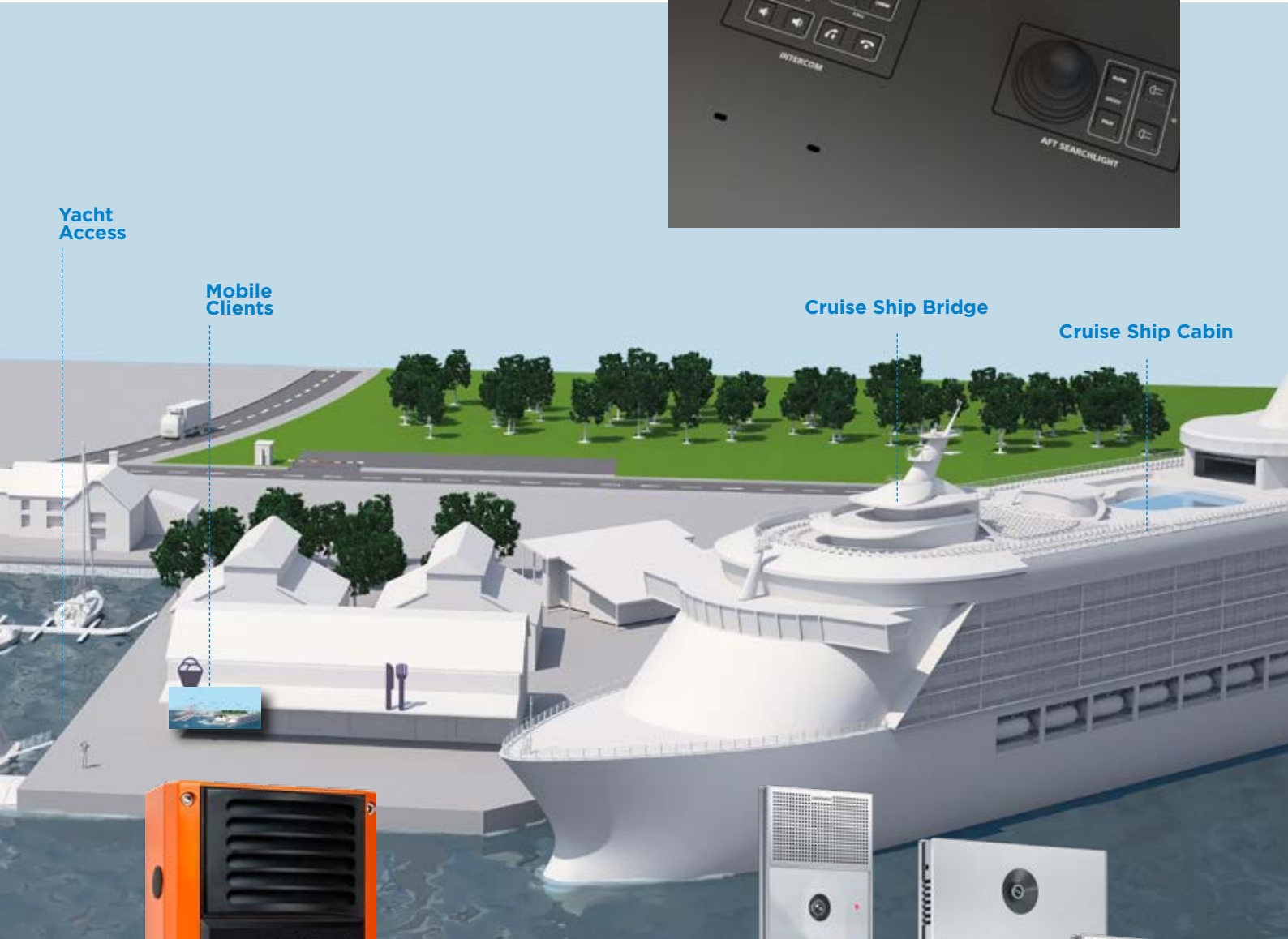From module to GUI integration via API.

Yacht Access

Mobile Clients

Cruise Ship Bridge

Cruise Ship Cabin

Heavy duty IP-Intercom Stations
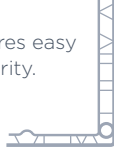Masterfully reliable in the roughest of environments.

Touchscreen IP-Stations
Customisable screens according to the applications.

SERIES 7506 INTERCOM STATIONS

Durable double-walled construction made from high-performance polycarbonate

– Corrosion-proof
– Orange signal colour ensures easy visibility for optimum security.
– IP66, IK10

Robust membrane keypads for heavy-duty applications

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

IP-Connectivity

Communication over SIP

Perfect speech intelligibility and extra-high volume

Powerful enough to overcome interferring noise and Intelligent Volume Control (IVC) adapts the volume to ambient noise conditions.

Connection possibilities

– Separately placed loudspeakers
– Versions for connection of handset or headset

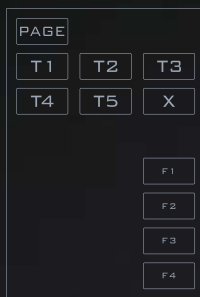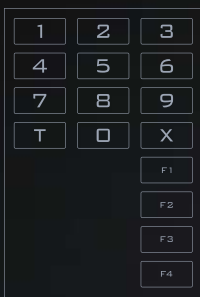**Redundant power supply**

with Fall Back Mode

Inputs/Outputs

Monitoring inputs (e.g. sensors) and controlling outputs (e.g. doors)

Different keypad layouts

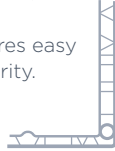Full keypad / Party-Line Conference calls / Direct dialling

SERIES EX 7000 INTERCOM STATIONS

Durable double-walled construction made from high-performance polycarbonate

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

Reliable, whatever the weather

Developed to withstand extreme ambient conditions.

Direct connection, power supply and control of flashing warning beacons

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

Absolutely watertight and dustproof microphone

Can be configured as a noise cancelling microphone.

Extra-high volume capacity up to 118 dB

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

Direct connection of separately placed loudspeakers

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

Robust membrane keypads for heavy-duty industrial applications

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

Three keypad layouts

Full keypad / Party-Line Conference calls / Direct dialling

GAS	DUST
IIC	**IIIC**
Highest Explosion Hazard Group	Highest Explosion Hazard Group

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

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

T6	**T80°C**
Highest Temperature Class	Highest Temperature Class

Version with loudspeaker

Version without loudspeaker

Version with handset

COMPOSE YOUR STATION

The modularity of the system allows for great flexibility. Ognios Modules can be easily combined with each other and according to your individual needs.

RELIABLE, WHATEVER THE WEATHER

Developed to withstand extreme ambient conditions. Protection Type IP 65. Temperature range from –40°C to +70°C.

DESIGNED TO ENDURE

Fatigue-resistant high-grade materials ensure outstanding longevity and mechanical ruggedness.

CERTIFIED QUALITY

Designed and developed according to the latest regulations of the IMO.

LOUD AND CLEAR

Ultimate speech intelligibility thanks to the 2 Microphones with Beam-forming technology together with a high sound pressure level (5 W Amplifier – RMS)

IP-CONNECTIVITY

Communication over SIP

RINA

BSH
BUNDESAMT FÜR
SEESCHIFFFAHRT
UND
HYDROGRAPHIE

TYPE APPROVED PRODUCT
DNV
DNV.COM/AF

SIP MODULES

The SIP Module is the centrepiece of every Ognios Intercom Station. It combines all functions of the numerous modules of an Intercom with state-of-the-art technology. Various functions for monitoring the networked server or connected modules and tamper contact provide security and reliability. Encrypted transmission protects against unauthorised access to the system.

SIP BASIC
EC MA MUN CPU1
SIP-Module to build stations with button modules. 2 inputs for floating contacts. PoE/PoE+/24 VDC/1.5 A

SIP ADVANCED
EC MA MUN CPU2
SIP-Module to build stations with buttons, camera and/or touch screen. 2 inputs for floating contacts, USB port, Audio interface. PoE/PoE+/24 VDC/1.5 A.

SIP ADVANCED-PLUS
EC MA MUN CPU3
SIP-Module with integrated Server and to build stations with buttons, camera and/or touch screen. 4 inputs for floating contacts, 2 relay outputs, USB port, Audio interface. PoE/PoE+/24 VDC/1.5 A.

STATION MODULES

EC MA MUN LS10

Loudspeaker Module with LED ring (RGB), which shows system and Intercom status; watertight with poke protection.

EC MA MUN CAM1

Camera Module with HD quality and wide viewing angle. The camera lens is resistant to tough environmental factors.

EC MA MUN MICS

Microphone Module with two digital microphones. Beamforming to locate the speaker and to suppress background noise.

EC MA MUN PBS1

Push Button Module with one call button and illuminated labelling field.

EC MA MUN PBS2

Push Button Module with two call buttons and illuminated labelling fields.

EC MA MUN PBS3

Push Button Module with three call buttons and illuminated labelling fields.

EC MA MUN KB16

Keypad Module with 16 buttons.

All buttons are illuminated and enable error-free input even in poor lighting conditions

EC MA MUN TD03

Touch Screen Module 3,5 inch with background light, key tones, light sensor and proximity sensor.

OEM Versions

All modules are available as OEM-versions to create custom stations and front panels or to integrate into different systems (e.g. Alarm Panels, Bridges, etc.)

FRAMES

EC MA EUN DF2S V4

Stainless steel frame for 2 modules (V4A).

EC MA EUN DF3S V4

Stainless steel frame for 3 modules (V4A).
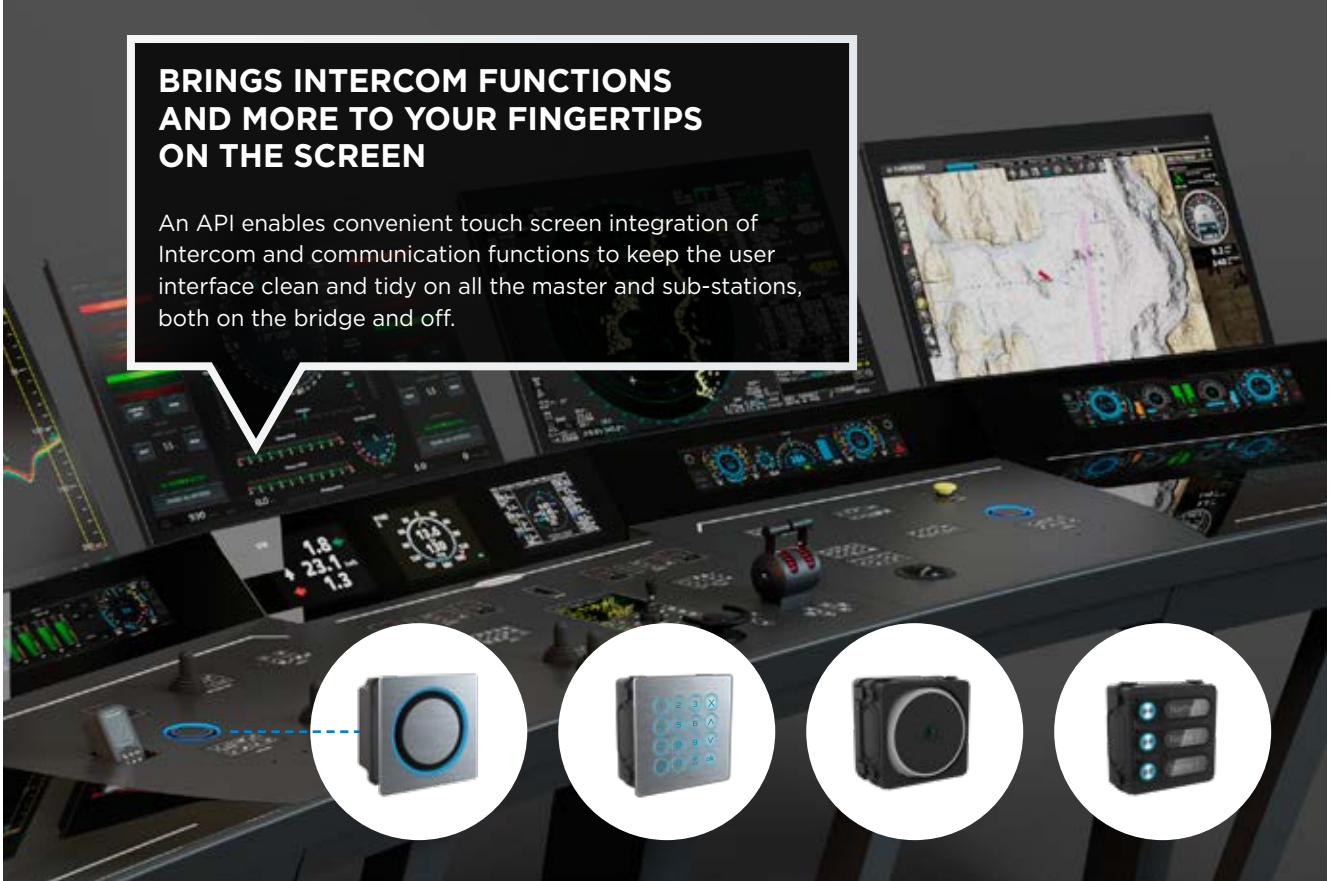
I/O MODULE

EC MA MUN IO8

Module for 8 inputs 8 relais outputs (switch contacts).

BUILD YOUR OWN USER INTERFACES WITH INTEGRATED BRIDGE INTERCOM

BRINGS INTERCOM FUNCTIONS AND MORE TO YOUR FINGERTIPS ON THE SCREEN

An API enables convenient touch screen integration of Intercom and communication functions to keep the user interface clean and tidy on all the master and sub-stations, both on the bridge and off.

ON COURSE FOR INTEGRATED ON-BOARD COMMUNICATION

A ship's bridge is its central command and control centre – its nerve centre, where countless functions and controls converge. To keep everything running smoothly on the bridge, a unified user interface is the proven state of the art. Instead of sailing against the wind with separate controls for all the various systems, it ensures plain sailing with all controls right at the captain's fingertips.

MODULE INTEGRATION

On-board communication is one of the most crucial functions on this integrated control centre. Ognios by Commend gives you all the tools to ensure 'seaworthy' communication. From Intercom to PA, everything interfaces seamlessly for a superior communication experience, even against background noise from engine, wind or waves. With functions from zone broadcasting to radio support, virtually any on-board communication need is catered for.

Ognios modules such as loudspeakers, handset, gooseneck microphone and call button modules all blend in smoothly with the ambient design.

To add even more flexibility to your custom layouts and integrations, Ognios by Commend also supports the Open Bridge Design system

COMMUNICATION PANELS

Communication panels for intercom, public address and radio can be assembled in a modular way and mounted on the ship's bridge.

Direct dialling buttons can be individually configured for frequently required functions – whether intercom, public address zones or radio.

In addition to the gooseneck, a handset can also be integrated, but also the touch screen for all call destinations.

ULTIMATE RELIABILITY

EC MA MUN SSER

The Server Module is the core of the entire Intercom system. Various functions for monitoring the Intercom stations or connected modules and redundancy possibility with a second Server module provide high availability for critical communication.

The web configuration and management offers a high-level of service convenience.

The Server module is suitable for installation in a control panel (top-hat rail mounting). The power is supplied through a PoE, PoE+ or external connection of 24VDC.

A dedicated bus system for connecting up to five I/O Modules is available internally.

Dimensions	**Inputs**
112 x 107 x 67 mm	2x

Working Temperature Range	**Power Supply**
–40 °C / +70 °C	PoE/PoE+/24VDC/1.5A

Protection Type	**VoIP-Protocol**
IP 20	SIP

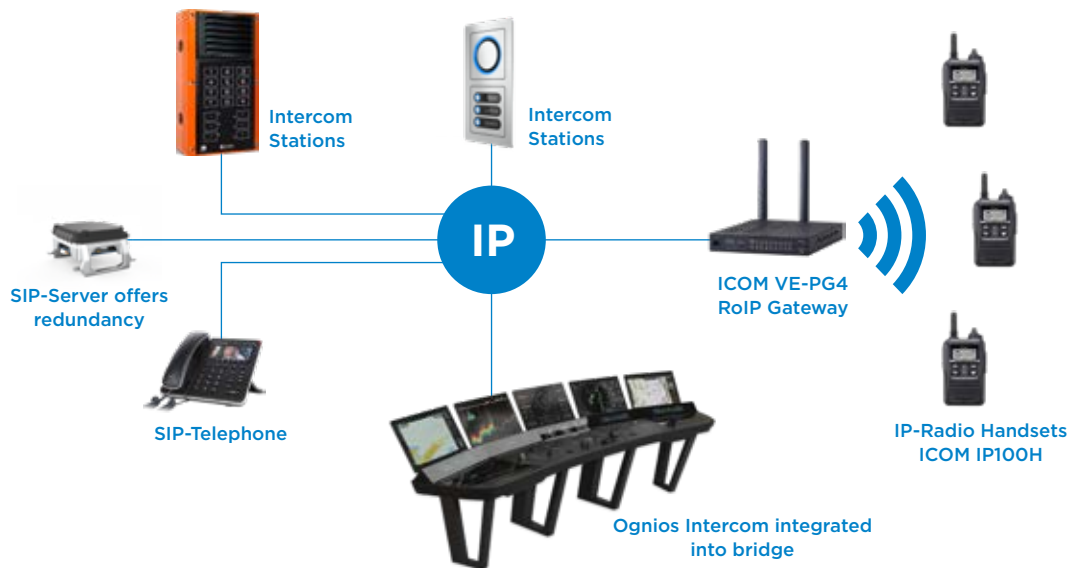**Relay-Output**

1x Switch Contact

ICOM MOBILE RADIO-INTEGRATION

Since the beginning of modern shipping, mobile radio has been the central communication platform between ships, ports and also on board. On board, it is mainly used to be mobile while on the move and still be reachable at any time and also to stay in contact with the bridge at all times. Ognios now connects radio with Intercom and enables a unified communication platform. One can speak of Intercom stations with radio participants and all stations can also be reached by radio.

Intercom Stations

Intercom Stations

IP

SIP-Server offers redundancy

ICOM VE-PG4 RoIP Gateway

SIP-Telephone

Ognios Intercom integrated into bridge

IP-Radio Handsets ICOM IP100H

KEY FEATURES AND BENEFITS OF RADIO INTEGRATION

– Connect Ognios systems to the ICOM radio world using a VE-PG4 RoIP Gateway to enable two way radio communication between these two worlds via SIP-Trunk.

– Make announcements from mobile radio handsets to Intercom stations.

– Enables communication from Intercom stations to the whole radio network.

– Ognios modules can be integrated into the bridge and can be used for communication to Intercom stations and ICOM mobile radio without the need to have a separate mobile radio device.

– Works with numerous SIP clients e.g. telephones.

– Optional redundant Intercom system architecture to ensure high availability.

UNIFIED PUBLIC ADDRESS

SCALABLE FROM DECENTRALISED TO CENTRALISED SOLUTIONS

A high performance level and a selection of different audio outputs are among the main characteristics of Series AF amplifiers. They are designed for universal use in applications up to complex PA and Intercom solutions. All models come in a compact housing and provide different installation options in addition to an efficient design and high performance. This makes them suitable for a wide variety of applications. With a flexible design like that, the devices also keep expenses

low in terms of cabling and energy requirements. What is more, they integrate easily into networks and offer numerous security functions, such as loudspeaker-to-line monitoring and self-monitoring of their audio functions. As a result, Series AF amplifiers make PA not just secure, but highly efficient.

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

AF 125H – 125 Watt IP Amplifier

Hybrid IP (IoIP/SIP), Class-D amplifier, robust metal housing for 19"-Racks (1U)

70 V / 100 V loudspeaker output

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

Supports N+1 functionality

AF 250H – 250 Watt IP Amplifier

Hybrid IP (IoIP/SIP), Class-D amplifier, robust metal housing for 19"-Racks (1U)

70 V / 100 V loudspeaker output

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

Supports N+1 functionality

AF 500H – 500 Watt IP Amplifier

Hybrid IP (IoIP/SIP), Class-D amplifier, robust metal housing for 19"-Racks (1U)

70 V / 100 V loudspeaker output

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

Supports N+1 functionality

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

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

HOW TELEPHONES CAN INTEGRATE WITH PA SOLUTIONS

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

MARITIME GRADE LOUDSPEAKERS

HP-20(T)
20W plastic IP67 marine grade weatherproof horn speaker, max. SPL 110 dB

HP-30(T)
30W plastic IP67 marine grade weatherproof horn speaker, max. SPL 110 dB

HP-6C(T)
6W plastic miniature loudspeaker is marine grade IP67 weather proof rated, max. SPL 100 dB

HPS-6
6W plastic miniature loudspeaker is marine grade IP67 weather proof rated, max. SPL 100 dB

CEILING LOUDSPEAKERS

BS-560(T)
5" 6W ceiling-speaker. Secure screw fit alu, max. SPL 90 dB

BF-620(T)
6W ceiling-speaker with protective dust box and secure screw mounting, max. SPL 92 dB

BP-361T
6W ABS - Aluminium ceiling-speaker with secure screw mounting, max. SPL 90 dB

BPF-660(T)
6W ABS – PA – (V0) loudspeaker, max. SPL 93 dB

CABINET LOUDSPEAKERS

B-406(T)
6W plastic low profile cabinet speaker, max. SPL 94 dB

BLC-550(T)
6W plastic circular surface mount cabinet speaker, max. SPL 90 dB

SAFE-10P(T)
10W plastic IP44 rated cabinet speaker, max. SPL 87 dB

LOUDSPEAKERS FOR EX ENVIRONMENTS

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

DSP-15EExmNL(T)
25 W pressure chamber loudspeaker for Ex-Zone 1,2/21,22, max. SPL 109 dB, IP66/67

HP-20EExIIN(T)
20 W pressure chamber loudspeaker for Ex-Zone 2/22, max. SPL 110 dB, IP67
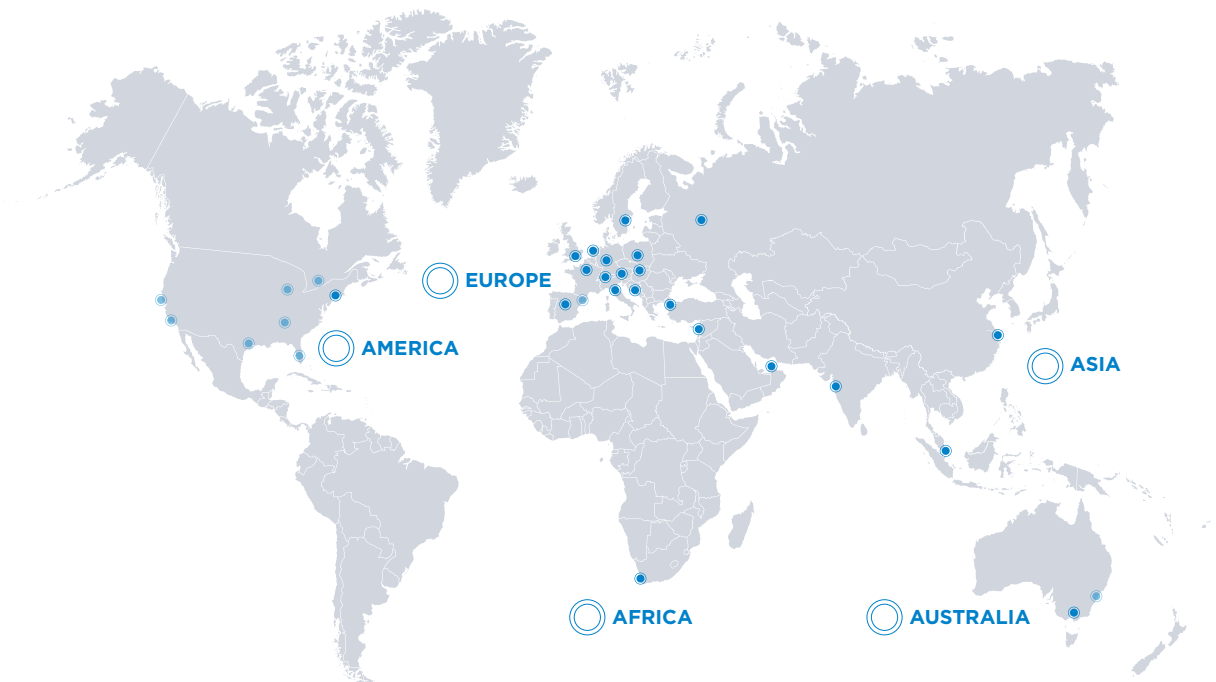
CAREEX-6(T)x2
Bidirectional Ex loudspeaker, max. SPL 81 dB, IP67 (e-chamber)

COMMEND WORLDWIDE

23 sales organisations operating in more than 60 countries.
More than 550 employees worldwide.

A **TKH** TECHNOLOGY COMPANY

EUROPE

AMERICA

ASIA

AFRICA

AUSTRALIA

TRUSTED. COMMUNICATION. ALWAYS.

Can you imagine a system that millions of people rely on every day, where every word has to count? This is the world of Commend! Secure, reliable communication is our passion. As a global market leader with more than 50 years of experience in speech transmission, we provide not just Intercom and video connections with interfaces to third-party systems, we also provide products that open up new possibilities for integrated solutions. Commend is the preferred choice for hands-free voice communication systems all over the world.

CYBER SECURITY

Digital processes make life a lot easier. However, with all the benefits, also the dark sides arise. Digitization offers space for cybercrime. As a result, cyber security is constantly in our focus. It determines the way we develop products, which IT technologies we use in our products and how we fulfil our commitment to regular updates, including new IT security fixes, because Privacy and Security by Design is our top priority at Commend. Commend International is ISO 27001 certified – Information Security Management.
Learn more: **trust.commend.com**

QUALITY TESTED. RELIABLE. WELL-DESIGNED.

Commend products are developed and manufactured by Commend International in Salzburg, Austria. Our development and manufacturing processes are certified in accordance with EN ISO 9001:2015. Security by Design is our top priority at Commend.

Do you also want to learn more about Maritime Solutions by Commend?

Find out more – Call us

ognios.commend.com