WS 300V CM / WS 311V CM

Vandal resistant wallmount stations with built-in HD camera

SIP video

High Volume

Weather-proof **IP66**

7 kHz HD Voice

Vandal-resistant **IK09**
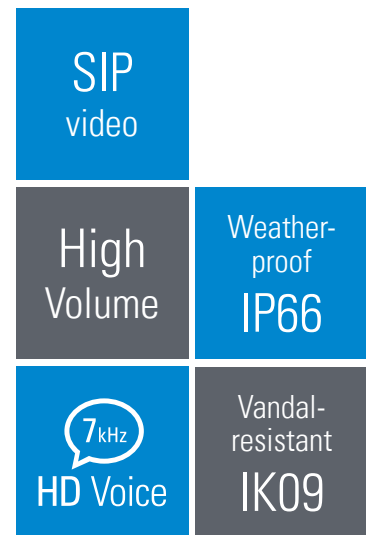
The Intercom video solution for security-critical applications

The vandal resistant SIP wallmount stations of series WS 300V CM and WS 311V CM with built-in high-performance colour video camera were developed and designed specifically for areas with high requirements on safety and system integration. The technology provides excellent audio quality and comprehensibility independent of background noise.

Each button of a series WS 300V CM station can be allocated to a call number and can be labelled individually. The red emergency call button of the WS 311V CM is easily visible from a considerable distance and can be pushed quickly in emergency situations.

The 3 mm thick stainless steel front panel with tamper protection and special screws offers protection against vandalism. The robust construction also provides full protection against water, dirt and dust and is IP66-rated.

The series WS 300V stations are equipped with a sensitive camera sensor that offers a superior dynamic range. Despite the flat front glass the camera still has a very wide viewing angle, both horizontally and vertically.

Features and highlights

The two built-in loudspeakers support **high audio volumes and superior acoustic intelligibility**; they also allow automated playback of pre-recorded audio messages for user guidance purposes.

The **robust stainless steel construction and IP66 rating** ensure uninterrupted, trouble-free operation in publicly accessible outdoor areas while providing full protection against water, dirt and dust.

Commend offers three versions of series WS 300V stations to suit your individual needs: You can choose between **one or three call buttons**, each with its individual label, **or a red emergency call button** that can be pressed quickly in emergency situations.
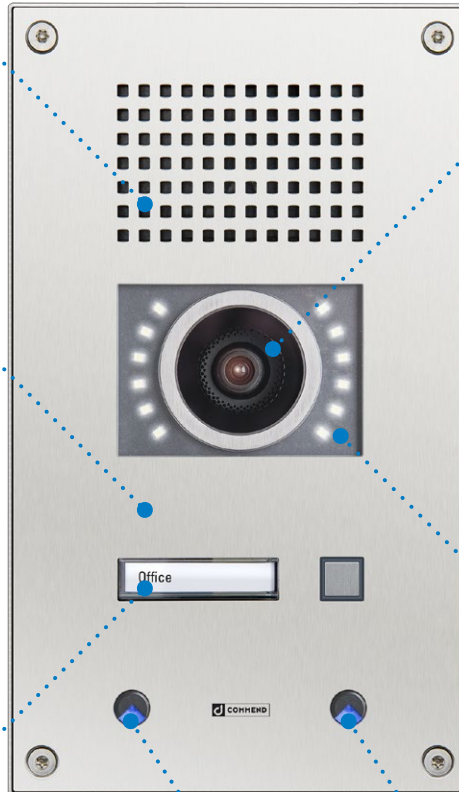
The **camera** provides a very large viewing angle (150° diagonally) as well as an ultra high dynamic range. In addition, the station is equipped with flat scratch-resistant camera glass for extra sabotage protection.

12 white LEDs make a big difference, as they make colours visible even at night – another feature that sets the station series above other Intercom stations on the market.

Two **digital MEMS microphones** ensure high sound quality, reliability, durability and robustness. The bevelled edge of the microphones adds to the stability of the series WS 300V CM / WS 311V CM stations.

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Features and highlights

Optimum speech intelligibility

A loud, clear and beautifully crisp voice signal ensures natural, face-to-face style communication with visitors and customers – even in challenging situations:

– Suppression of interfering background sounds such as traffic noise
– Easy to hear, thanks to higher volume capacity than standard SIP stations
– OpenDuplex® for simultaneous speaking and listening at high volume levels
– Switched Duplex for situations with extreme ambient noise (e.g. tunnels)
– HD Voice speech quality with 7 kHz audio bandwidth

Automated voice messages

Pressing the call button at an entrance or emergency call station triggers the playback of a customised voice message, reassuring the caller that someone will be available shortly to assist.

Always at your service, thanks to redundancy

– Stations can be logged in at several servers simultaneously
– Calls are transmitted via the active server
– In case none of the servers can be reached, the system can try to establish a serverless connection if necessary – e.g. by calling all stations on the network

Relays enable powerful control functions *

Stations come with the ability to remote-control relays:

– Doors, shutters, gates and barriers open effortlessly at the touch of a button (desktop or mobile telephone) Easy control of signal lamps and other subsections
– Attendant contacts for additional indication of operating states such as error, ringing, active call, etc. (e.g. automatic activation of flashing light signal to indicate incoming calls)

* Only with expansion module EB3E2A-AUD

Location identification messages

An optional location identification message (e.g. "Emergency Call Station at Subway Station West Park") can be defined for each station individually. The identification message is played back automatically when the operator at the control desk or query point takes the call. This way, the operator knows immediately where the call is coming from without having to ask. This is particularly important if there is no visualisation system installed at the control desk or query point, or if the call is relayed to a mobile phone.

Quickly assign calls and reduce waiting times

In serverless communication scenarios the next free query point is found by calling each one using an action sequence. Server integration, on the other hand, allows for incoming calls to be allocated instantly and automatically to the next available operator (e.g. at a call centre). This way, waiting times for callers are reduced to an absolute minimum.

Configuration made easy

The stations are specifically designed for easy, convenient configuration over the special web interface. A few clicks is all it takes to perform an update and even set up complex action sequences. For large-scale installations, the provisioning function helps to deploy configuration settings automatically and conveniently to thousands of connected stations at once.

Simply compatible

Stations can be integrated seamlessly into existing Commend security and communication systems as needed. This allows adding features such as announcements, audio recording, interfacing with external systems (e.g. visualisation) and many more.

Wide range of functions

– Telephone directory
– USB ports for add-on modules or expansion modules

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Product details

Station versions

Series WS 300V CM

This series includes the following versions:

WS 301V CM
One call button

WS 303V CM
Three call buttons

Series WS 311V CM

This series includes the following version:

WS 311V CM
One emergency call button

Accessories

Images not ot to scale!

Optional expansion module EB3E2A-AUD

The EB3E2A-AUD expansion module provides an easy way to expand the I/O and audio capabilities of an Intercom station. It supports three inputs and has two output relays and provides ports for direct connection of an external loudspeaker, external microphones and handset. Line-in and line-out connectors provide additional flexibility. The module is connected to the Intercom station PCB via a USB cable and is immediately available on the system.
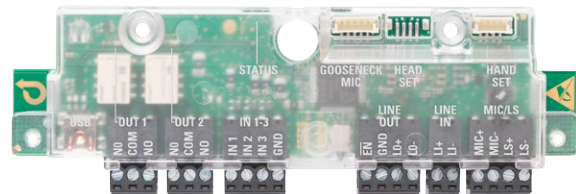
Optional power injector PA 25W POE-DC

In applications where PoE sourcing equipment is not available, the optional power injector PA 25W POE-DC offers a compact, convenient solution. It supports a wide DC input range (24–48 V) and is IEEE 802.3af/at compliant. The power injector connects easily and conveniently to an Intercom station via Ethernet cable.

Optional safety switch box IP Secure Connector

The IP Secure Connector ensures absolute safety for the network – even if the connected Intercom station is located outdoors: If an unauthorized attempt is made to remove the Intercom station, e.g. to gain access to the connected Ethernet cable, the IP Secure Connector interrupts the connection to Intercom station and LAN. This ensures that it is neither possible to access the network nor to open a door or gate. In addition, the IP Secure Connector provides power supply in form of PoE+ and has two inputs as well as three outputs.
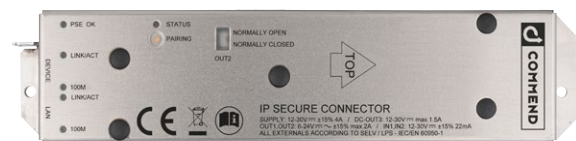
Note:
EB3E2A-AUD and PA 25W POE-DC are optimised for installation within the flush mount box WSFB 50V or the surface mount box WSSH 50V.
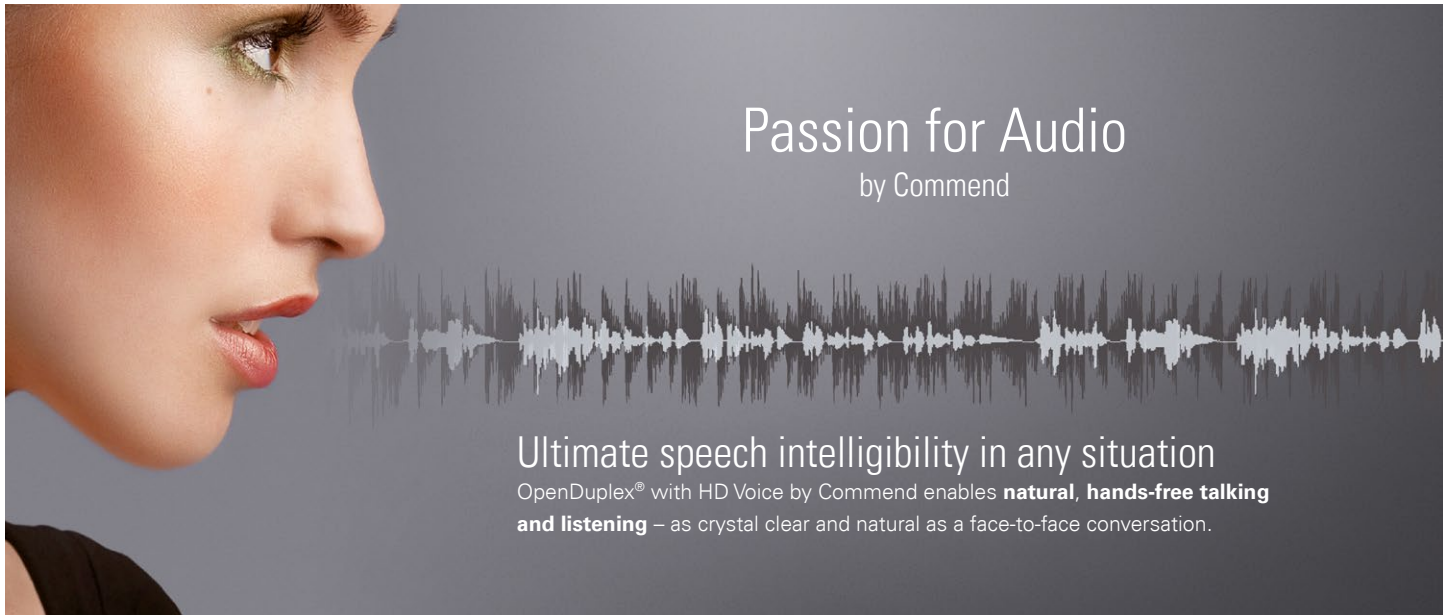
Passion for Audio
by Commend

Ultimate speech intelligibility in any situation
OpenDuplex® with HD Voice by Commend enables **natural**, **hands-free talking and listening** – as crystal clear and natural as a face-to-face conversation.

The ORIGINAL OpenDuplex® since 2003	7 kHz HD Voice	🔊		
Natural communication	Crystal clear audio	High volume	Background noise suppression	Beamforming

Audio // Basics

HD Voice	HD Voice by Commend transfers the audio signal with a bandwidth of **7 kHz**
Amplifier	High efficient class-D amplifier with 2.5 W
Sound pressure level	**High volume** up to **99 dB**
Microphone	Two digital MEMS microphones
Loudspeaker	2 x 8 Ω loudspeaker with humidity-resistant special membrane type for optimum sound quality

Learn more
audio.commend.com

Audio // Functions

Dynamic **background noise suppression** virtually eliminates all ambient noise

Peer-to-peer audio – reduces network and server load to ensure efficient use of resources

Conference call function for simultaneous talking with multiple conversation partners

OpenDuplex® for natural, hands-free communication

Switched Duplex for situations with extreme ambient noise (e.g. tunnels)

Beaforming for best intelligibility and ambient noise suppression

WS 300V CM / WS 311V CM
Technical specifications

Technical data WS 300V CM / WS 311V CM

IP rating:	IP66 (acc. EN 60529)
Mechanical impact resistance:	IK09 (acc. EN 62262)
Front panel:	stainless steel, 3 mm (0.12 in)
Microphone:	2 x digital MEMS microphones
Loudspeaker:	special membrane type for optimal sound quality
Amplifier:	integrated class-D amplifier with 2.5 W
Sound pressure level:	max. 99 dB
Call indication:	2 x multifunction LED (multi-coloured)
Call button:	WS 301V CM: one back-lit direct dialling button with label area WS 303V CM: three back-lit direct dialling buttons with label areas WS 311V CM: one back-lit large red emergency call button
Audio transmission bandwidth:	7 kHz
Operating temperature range:	−40 °C to +65 °C (−40 °F to +149 °F)
Storage temperature range:	−40 °C to +65 °C (−40 °F to +149 °F)
Relative humidity:	up to 95%, not condensing
Connection:	RJ45 jack for Ethernet and PoE, USB (Type A) and mini USB (Type A) for external devices
Power supply:	PoE: IEEE 802.3af/at Class 3
Cabling:	min. Cat. 5
Mounting:	flush mount kit WSFB 50V surface mount kit WSSH 50V
Dimensions (H x W x D):	mounting with flush mount kit: 279 x 164 x 14 mm (10.98 x 6.46 x 0.55 in) mounting with surface mount kit: 279 x 164 x 50 mm (10.98 x 6.46 x 1.97 in)
Weight incl. package:	1,400 g (3.1 lbs)
Optional accessories:	PA 25W POE-DC (power injector) EB3E2A-AUD (expansion module) IP Secure Connector (safety switch box)

Technical data camera

Image sensor:	1/3 inch RGB CMOS
Lens:	F2.0, fixed aperture, 150° diagonal angle, 125° horizontal angle, 100° vertical angle
Camera illumination:	12 white LEDs
Resolution:	1280 x 960
Video format:	H.264, Motion JPEG (MJPEG)
Frame rate:	30 fps

System requirements

- Compatible SIP server
- VirtuoSIS (min. PRO 800 5.0, min. base licence PRO 3)
- GE 800 with G8-VOIPSERV
- Serverless operation

Line length in LAN

The maximum line length of Cat. 5 cabling in a LAN is 100 m (328 ft) – e.g. from switch to Intercom station.

Extent of supply

- SIP station
- Screws for mounting (4 x Torx TR25 security countersunk screws, M5x10)
- Short reference
- Tamper detection plate

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WS 300V CM / WS 311V CM
Installation instructions

Mounting instructions

- Do not expose the Intercom station to extreme temperatures (see "Technical data" on TE | 1).
- This Intercom station shall be installed or replaced by trained and qualified personnel only.
- Do not install the Intercom station on unstable walls or on surfaces, which cannot support the device's weight.
- Observe the country-specific standards for installation, mounting and configuration.
- Observe the precautions for handling of electrostatic sensitive devices.
- Only use recommended tools when installing the Intercom station.
- Only accessories that comply with the Intercom station's technical specifications shall be used.
- Use shielded Ethernet cables only.

- All connected circuits shall fulfil the requirements for Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/EN 60950-1.
- Before using the Intercom station, ensure all cables are correctly connected and not damaged.
- Disconnect the Ethernet cable for any maintenance of the device.
- Allow the device to cool down completely before touching parts inside.
- Do not make any unauthorised modifications to the Intercom station.
- For flush mounting, a flush mount kit WSFB 50V is required (available separately).
- For surface mounting, a surface mount kit WSSH 50V is required (available separately).
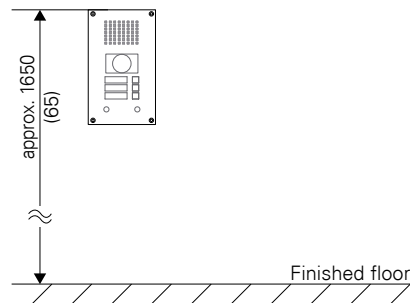- Optionally, the rain protection roof WSRR 50V is available.

Dimensions front panel

Measuring units in mm (in), not to scale!
Front panel thickness: 3 mm (0.12")
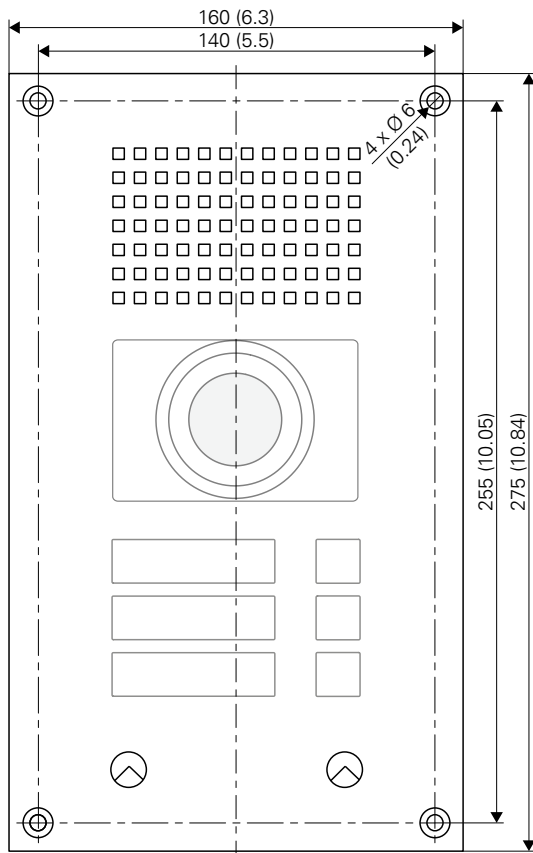
Recommended mounting height

The upper edge of the station approx. 1.65 m (5.4 ft) from the finished floor. Adapt the mounting height to the individual needs.

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Mounting of EB3E2A-AUD and PA 25W POE-DC

The following illustration shows the mounting of both modules (expansion module and power injector) within a flush mount box – e.g. flush mount kit WSFB 50V or surface mount kit WSSH 50V.

NOTES:
– The power injector must always be placed on the left side within the flush mount box.
– The expansion module comes with a back cover. For mounting within the flush mount kit WSFB 50V or surface mount kit WSSH 50V, the back cover must be removed. The screws for the back cover can be used to mount the expansion module into the flush mount box.

Mounting of tamper detection plate

Install the tamper detection plate (for triggering the tamper detection alarm; in extent of supply) into the flush or surface mount box as shown in the following assembly drawing.
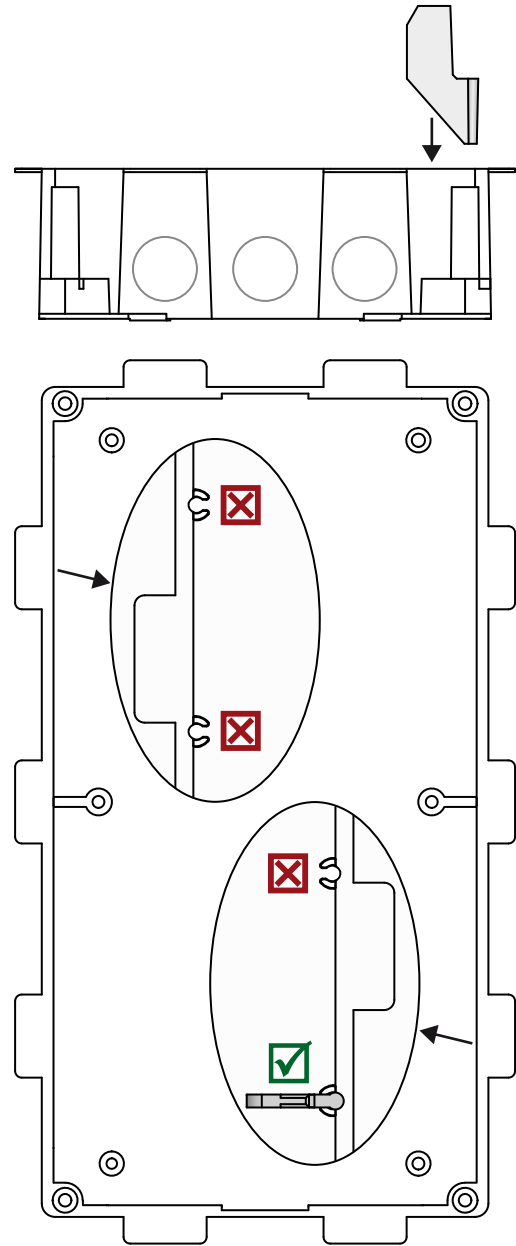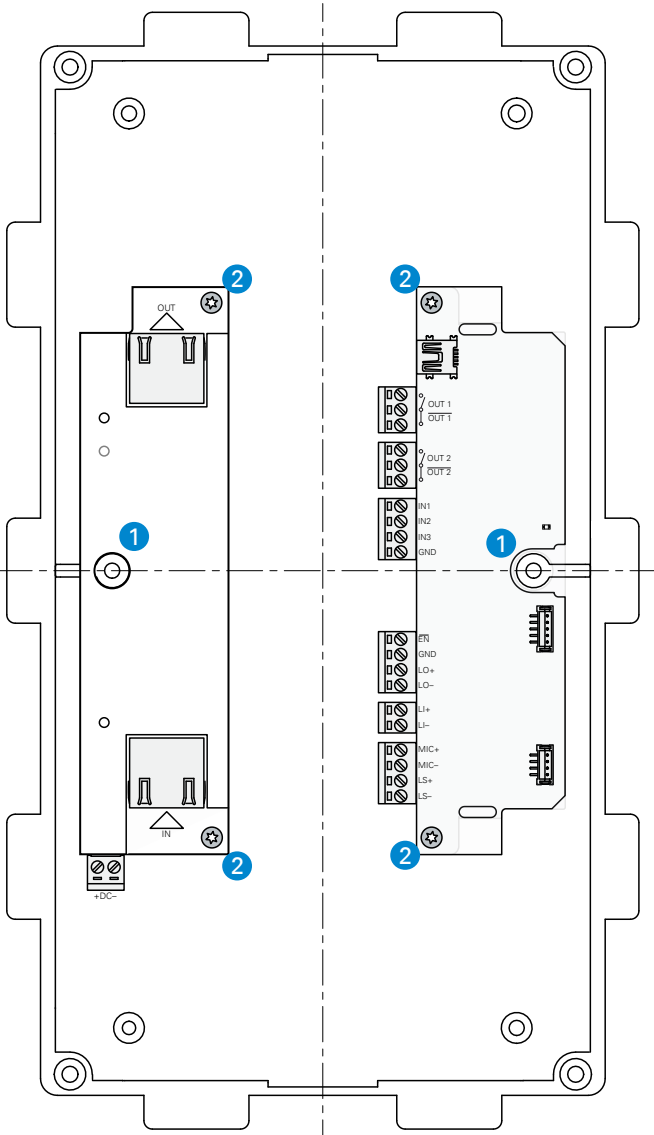
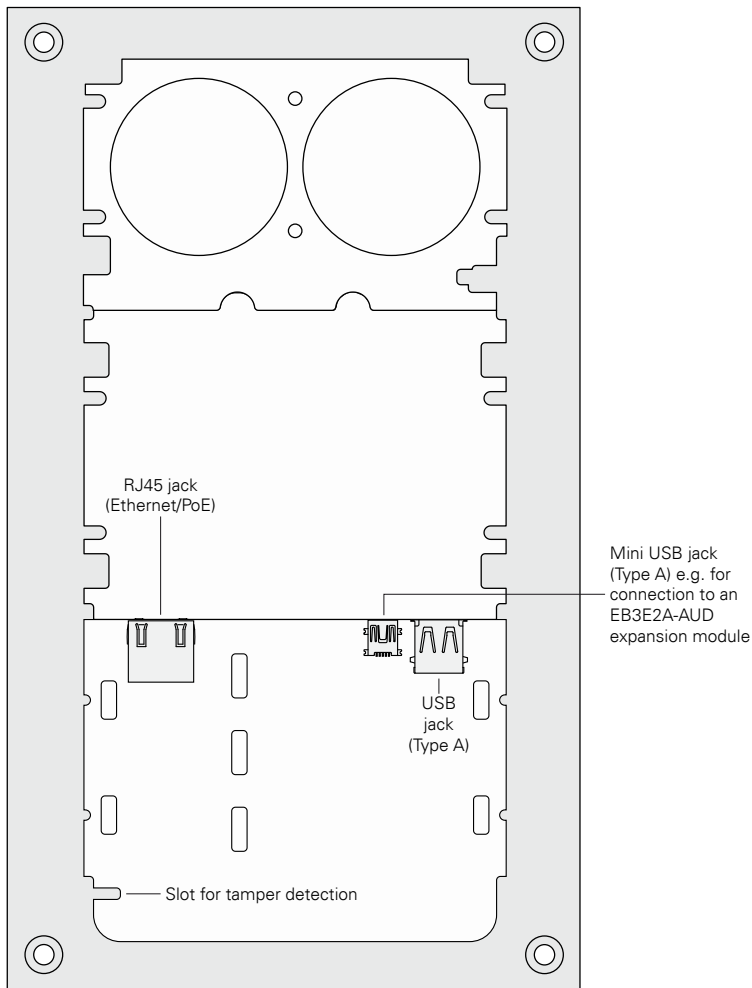**1** Put the modules into the flush mount box (no screws).

2 Use supplied screws to fasten the modules to the flush mount box.

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Connection

The following illustration shows the connection of the power injector or a switch and expansion module to the Intercom station.

RJ45 jack
(Ethernet/PoE)

Mini USB jack
(Type A) e.g. for
connection to an
EB3E2A-AUD
expansion module

USB
jack
(Type A)

Slot for tamper detection

Quality tested. Reliable. Smart.

COMMEND products are developed and manufactured by Commend International in Salzburg, Austria.

The development and manufacturing processes are certified in accordance with **EN ISO 9001:2008**.

AUSTRIA

OBS ESSIVE ABOUT QUAL ITY

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A strong worldwide network

COMMEND is represented all over the world by local Commend Partners and helps to improve security and communication with tailored Intercom solutions.

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