

# OD10 TD CM

High-end outdoor Intercom station, suitable for wall mounting



Ready for  
Symphony  
Cloud

Weather-  
proof  
IP65

Impact-  
proof  
IK07

Modular  
solution

10.1"  
touch display

Future-proof  
system

## Powerful solution for outdoor areas

Touch display equipped Intercom stations by Commend are suitable for any type of application requiring intuitive, yet precise user interaction. While offering standard menus for features such as subscriber lists, the graphical user interface can be adjusted to suit the user's requirements. Options range from creating custom menus to integrating interactive on-screen elements such as video feeds.

High-performance processors turn the OD10 TD CM into a communication powerhouse. With a dedicated emergency mode feature-set, the Intercom station transforms from everyday use into an emergency station for managing crises events. This also means you will be perfectly prepared to meet the upcoming standards – such as EN 62820-2 – the standard for Advanced Security Building Intercom Systems (ASBIS).

These high-end Intercom stations are crafted using high-quality materials, including glass and anodised aluminium. Thanks to their timeless look, they are ideally suited for use as multi-functional Intercom stations with advanced security mode for modern office buildings.

### Ready for Symphony Cloud Services

The Intercom stations can be connected to Symphony and use its services. Symphony is the world's first cloud-based Intercom platform with "Privacy and Security by Design". Visit the Symphony website to find out about the services currently available and if they are already offered in your country.

[symphony.commend.com](http://symphony.commend.com)

## Features and highlights

- Suitable for indoor and outdoor use
- High protection against vandalism (mechanical impact resistance IK07)
- Tamper detection (in combination with the surface mount kit OD10 SH or with the drywall/panel kit OD10 FB)
- 3 mm thick, tempered front glass
- Innovative sound concept with two lateral loudspeakers and two digital MEMS microphones
- Crystal-clear sound with up to 20 kHz speech quality and high volume
- Durable and resistant to wind and weather thanks to high-quality components and IP65 rating
- Robust, daylight-ready 10.1" touch display with brilliant colour reproduction
- High-resolution wide view angle video camera
- Sophisticated housing concept for simple, safe installation
- Surface and flush mount kits with locking mechanism
- OpenDuplex® for natural, hands-free communication with high-volume
- Permanent line and function testing
- Easy to extend with add-on equipment via USB interface
- 3 inputs for floating contacts and 2 relay outputs
- Motion detection for triggering action sequences

## Key benefits at a glance

Its megapixel video camera ensures a picture-perfect viewing angle – both day and night. It can even capture persons who are not at eye-level with the camera unit

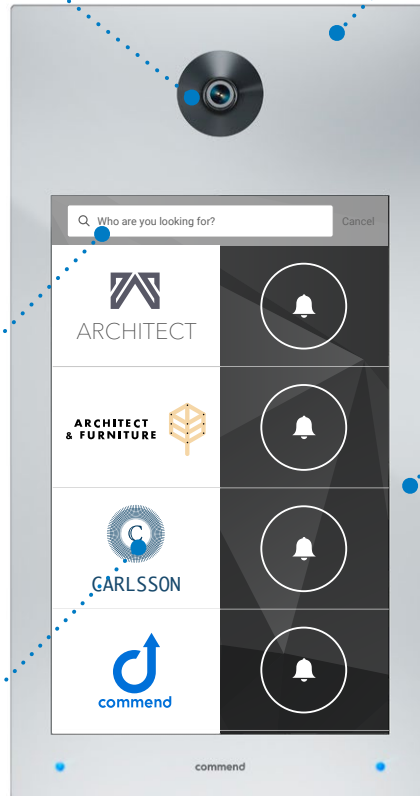
The Intercom stations are optimally protected against vandalism (IK07 rating, sabotage detection, ...).

The robust and very bright 10.1" touch display provides a clean overview and looks good from any position, thanks to its excellent viewing angle.

Up to 20 kHz speech quality and OpenDuplex® for natural hands-free communication with high volume capacity.

A real power pack with extensive feature set, the OD10TD CM comes well prepared for future solutions centered around Advanced Security Building Intercom (ASBIS) as per EN 62820.

The robust design, together with the high-quality technical components and IP65 rating ensure a long product life under outdoor conditions.



In addition to the two loudspeakers, two concealed digital MEMS microphones ensure high audio quality and perfectly clear speech intelligibility.

## Accessories

### Drywall/panel kit OD10 FB

With the drywall/panel mount kit OD10 FB, a base module can be installed e.g. to a gypsum wallboard. The OD10 FB is designed for wall mounting during the construction or renovation phase.

In combination with this drywall/panel mount kit, tamper detection is possible with an OD10 TD CM.



### Flush mount box OD10 FBS

With the flush mount box OD10 FBS, a base module can be installed e.g. to a brick wall. The OD10 FBS is designed for wall mounting during the construction or renovation phase. To mount the Intercom station, the drywall/panel kit OD10 FB is required. With this flush mount box, a plaster compensation is possible.



### Surface mount kit OD10 SH

With the surface mount kit OD10 SH, a base module can be installed to any wall. The OD10 SH is especially designed for subsequent mounting to a wall or for mounting to thin walls.

The surface mount kit OD10 SH can be mounted to a 2-fold flush-mounted wall box (acc. EN 60670-1; 60 mm/2.36 in screw distance).

In combination with this surface mount kit, tamper detection is possible with an OD10 TD CM.



#### Note:

It is possible to connect external USB devices to the device. The device supports the connection of a maximum of one USB device of the same type at any time. Example: One EB3E2A-AUD and one EB1E1A.

### Safety switch box IP Secure Connector

The IP Secure Connector provides high performance and high, absolute security, even if the connected Intercom station is located outdoors: If an unauthorised attempt is made to remove the Intercom station, e.g. to access 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. Furthermore, the IP Secure Connector provides power supply in form of PoE+ and has two inputs and three outputs.



### Induction loop kit AFIL-USB

With the AFIL-USB, an Intercom station can easily and quickly be equipped with an induction loop amplifier module. For this, only a free USB jack is required at the station. Thanks to its compact size, the AFIL-USB fits easily into a flush or surface mounting box.



### 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. The expansion module is suitable for any applications where inputs and outputs are required. It has three inputs, two output relays and ports for direct connection of an external loudspeaker, external microphones and handset. Line-in and line-out connectors provide additional flexibility. The board can be connected to the station PCB through a USB cable and is immediately available in the system.



### USB I/O module EB1E1A

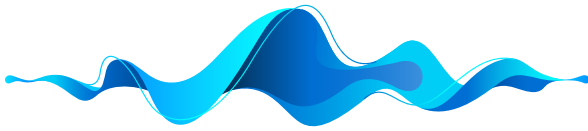
With the USB I/O module EB1E1A, a base module can be expanded with an input and a relay output (normally open contact). The EB1E1A can be connected to a free USB port. By doing this, a input as well as a floating, galvanically-isolated output contact is available immediately – e.g. for use with a door opener.



### 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 through an Ethernet cable.





CERTIFIED  
ACC. TO  
ISO 27001

## Passion meets audio

### Ultimate speech intelligibility

Because every word matters, high speech intelligibility is crucial in security and communication solutions. In everyday life, it enables natural and brilliant communication; in operational processes, it ensures improved efficiency and in an emergency often buys life-saving time.

#### High volume

When there is ambient noise, the Intercom station has sufficient reserves to put out the audio signal of the other party at a higher volume than any distracting background sounds.

#### Dynamic volume adjustment

**IVC (Intelligent Volume Control)** automatically adjusts the volume of the Intercom station's audio signal to the environment – because both, too low and too high a volume, significantly reduces speech intelligibility and the user experience.

#### Background noise suppression

To ensure that the other party clearly understands what is being said despite high levels of ambient noise, dynamic background noise suppression together with **beamforming** reduces interfering signal components effectively.

#### Hands-free communication through OpenDuplex®

This technology from Commend, combined with highly sensitive microphones as well as a high volume, allows natural and hands-free communication within a unique radius of several metres.

### Audio functions adding value

**Loudspeaker/microphone surveillance** – constant availability of Intercom stations while greatly reducing the manual testing effort.

**Simplex mode** – for applications requiring controlled communication, e.g. security or industrial solutions based on the push-to-talk/release-to-listen principle.

**Audio monitoring** – fully automated (emergency) call triggering at defined sound pressure levels for more safety.

**Live sound pressure level** – continuous measurement of ambient noise with optional transfer to a management system through SNMP or HTTPS (e.g. to visualise noise volumes).

**Equalizer** – for fine-tuning to ambient acoustic conditions.

**Public address functions** – as an essential element of a holistic solution approach, announcements can be made or played back at each Intercom station as well as responded to directly.

For more information, visit:

[audio.commend.com](http://audio.commend.com)

## Cyber security at Commend

### Uncompromising protection against threats

IT infrastructures are facing a growing variety of cyber threats. This means that the defensive capabilities of each product in the system environment are key.

**Security is above all a question of trust.** At Commend, cyber security as a core competence has always been given a very high priority. From the initial product idea through implementation and operational support, privacy and security by design (PSBD) is the uncompromising target and promise to our customers against which product features and functions must be measured.

#### Cyber security as top priority

- Commend as well as the hardware and software development process is rigorously certified according to the standard **IEC/ISO 27001** and subject to a company-wide information security management system (ISMS)
- Commend is a member of the **Center for Internet Security (CIS)**
- Commend's Cyber Security Board ensures the handling and transparent communication of security vulnerabilities as well as the strategic hardening of Commend systems
- Commend continuously publishes software updates with security patches and improvements

#### Physical security

- Robust devices and vandal-resistant product versions
- Tamper detection through electromechanical contacts
- USB and port-debugging protection

#### Network security

- **Standard IEEE 802.1x** for authentication (network access)
- **Standard IEEE 802.1q** for VLANs (network segmentation)
- Commend IP Secure Connector for automatic interruption of the network connection in the event of a tampering attempt

#### Data security

- **Encrypted and authenticated communication**
- **SIP over TLS v1.2** with secure cipher suites (> 128 bit)
- **SRTP** for tap-proof encryption of voice data
- **X.509 client certificates** for authentication and encryption
- TLS transport encryption for the protocols **HTTPS**, **SIPS** and **MQTT** to protect the web interface, APIs and video

#### Application security

- Mandatory change of the default password during the first login
- Minimum password length: 12 characters
- Detection of brute-force attacks at login
- Documentation and securing of network ports

Information about the cyber security of other Commend products can be found in the respective data sheets and product manuals.

For more information, visit:

[trust.commend.com](http://trust.commend.com)

# OD10 TD CM

## Technical specifications



### Technical data

<b>IP rating:</b>	IP65 (acc. to EN 60529)
<b>Mechanical impact resistance:</b>	IK07 (acc. to EN 62262)
<b>Salt spray test:</b>	672 h (acc. to IEC 60068-2-11/EN 9227)
<b>Front panel:</b>	hardened glass, AG85, 3 mm (0.12 in)
<b>Microphone:</b>	two digital MEMS microphones
<b>Loudspeaker:</b>	special membrane type for optimal sound quality, 2 x 8 Ω
<b>Amplifier:</b>	integrated class-D amplifier with 10 W
<b>Sound pressure level:</b>	max. 99 dB
<b>Display:</b>	10.1" touch display (IPS-TFT) resolution: 800 x 1280 pixels luminance: typ. 1000 cd/m <sup>2</sup>
<b>Inputs:</b>	3 inputs for floating contacts (switches, push buttons, relay outputs etc.) <sup>1)</sup>
<b>Outputs:</b>	2 relay outputs max. switching voltage: 60 VDC, 30 VAC, <sup>2)</sup> max. switching current (per output): 2 A max. switching power (per output): 60 W (DC), 37.5 (VA AC) electrical expected life: min. 5 x 10 <sup>5</sup> (30 VDC/2 A), min. 2 x 10 <sup>5</sup> (30 VDC/1 A)
<b>Audio bandwidth:</b>	up to 20 kHz
<b>Audio codecs:</b>	Opus, G.722, G.711 a-law and G.711 u-law
<b>Video features:</b>	codecs: H.264 (SIP video and ONVIF), MJPEG (HTTP video and ONVIF) and RTSP ONVIF specification: ONVIF Profile S
<b>IT security:</b>	SIP over TLS, SRTP, IEEE 802.1X, MJPEG via HTTPS, HTTPS for accessing the web interface and interfaces
<b>Protocols:</b>	IPv4, IPv6, TLS, TCP, UDP, HTTP (RFC 2617, RFC 3310), HTTPS (RFC 2818), RTP (RFC 3550), 802.1x EAP-TLS (RFC 5216), 802.1x EAP-MD5 (RFC 2284), RTCP, RTSP (RFC 2326), DHCP, DHCPv6, SDP (RFC 2327, RFC 4566), SSDP, SIP (RFC 3261), SIP over TLS, SNMPv2c, STUN (classicstun), SMTP, DTMF Decoding (RFC 2976, RFC 2833, SIP Info), ICMPv6 (Router discovery), MQTT (ISO/IEC 20922)
<b>Operating temperature range:</b>	-25 °C to +55 °C (-13 °F to +131 °F)
<b>Storage temperature range:</b>	-25 °C to +65 °C (-13 °F to +149 °F)
<b>Relative humidity:</b>	up to 95%, not condensing
<b>Connection:</b>	RJ45 jack for Ethernet and PoE (10/100 Mbit/s) 2 x 2.0 USB (Type A) for external devices <sup>3)</sup>
<b>Power supply <sup>4)</sup>:</b>	PoE+: IEEE 802.3at/Class 4
<b>Cabling:</b>	min. Cat. 5, shielded <sup>5)</sup>
<b>Approvals and compliances:</b>	EN 61000-6-2, EN 61000-6-3, EN 55032 Class B, EN 55024, EN 60529 IP65, EN 62262 IK07, IEC 60068-2-11, EN 62368-1
<b>Wall mounting:</b>	drywall/panel mount kit OD10 FB flush mount box OD10 FBS (requires OD10 FB) surface mount kit OD10 SH
<b>Dimensions (H x W x D):</b>	with flush mount kit: 326 x 174 x 20 mm (12.83 x 6.85 x 0.79 in) with surface mount kit: 326 x 174 x 43 mm (12.83 x 6.85 x 1.69 in)
<b>Weight incl. packaging:</b>	approx. 3,000 g (6.61 lbs)

### Optional accessories:

AFIL-USB (induction loop kit)  
EB1E1A (USB I/O module)  
EB3E2A-AUD (expansion module)  
IP Secure Connector (safety switch box)  
PA 25W POE-DC (power injector)  
RJ45-MONT (Ethernet socket)

<sup>1)</sup> For the switching positing "ON", the switch resistance has to be less than 1 kΩ.

<sup>2)</sup> The relay output may only be connected to an ES1 or a SELV circuit! An ES1 circuit as per IEC/EN/UL 62368-1 or a SELV circuit as per IEC/EN 60950-1 must be separated safely from a dangerous electrical circuit (e.g. 230 V or 110 V mains power), e.g. by means of double insulation. The ES1 or SELV circuit must not exceed 60 VDC or 42.4 VAC<sub>peak</sub> (30 VAC<sub>eff</sub>)!

<sup>3)</sup> The USB connections are only intended for use with Commend devices. Do not use the USB jacks e.g. to charge mobile phones.

If a USB device should be installed separately using a USB extension cable, the USB cable length must not exceed 3 m. In addition to that, it is recommended to attach a ferrite to a USB cable with a length of 1 m or more.

<sup>4)</sup> For power supply, a PoE switch or PoE injector is required (not included in extent of supply), e.g. IP Secure Connector.

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

### Technical data camera

<b>Image sensor:</b>	1/3" RGB CMOS
<b>Lens:</b>	F2.4, fixed aperture, 150° diagonal angle, 145° horizontal angle, 123° vertical angle
<b>Minimum illumination:</b>	B/W: 1 lux, colour: 1.5 lux
<b>Resolution (W x H):</b>	1280 x 960 pixels
<b>Frame rate:</b>	up to 30 fps
<b>Video streaming:</b>	up to 6 HTTP video streams simultaneously

### Extent of supply

- Intercom station
- Cleaning cloth
- I/O plug
- Cat. 6 patch cable (0.3 m/12 in)
- TX 08 screwdriver
- Claiming code
- Short reference

### System requirements

#### Server

- Virtuosis (min. version 5.0) or
- S3/S6 (min. version 7.1) or
- Compatible SIP server or
- Serverless operation

#### Configuration software

- Set-UP min. version 1.5.3

### Access

The device can be accessed through IPv4 (DHCP), IPv6 (link-local) and zero-conf. For information on accessing the web interface, see the product manual.

# OD10 TD CM

## Installation instructions

### Mounting instructions

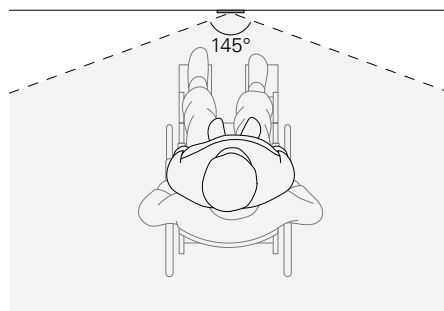
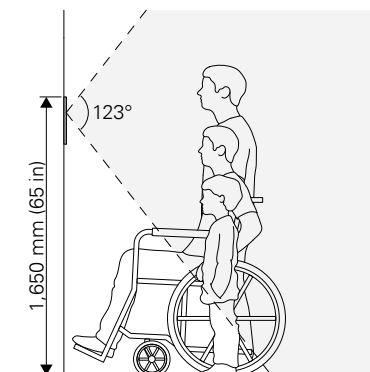
- Avoid direct sunlight.
- Install the Intercom station with a distance of min. 100 mm (4 in) to walls and other objects to enable access to the locking screws (Tx08) and to not mask the loudspeaker openings on the sides.
- For surface mounting, a surface mount kit OD10 SH is required (available separately).
- For flush mounting, a flush mount kit OD10 FB is required (available separately).
- If a field cable is used, it is recommended to install an RJ45 crimp jack (e.g. MODJ8-8KUPPL) at the open end of the field cable. Use a patch cable to connect the device to the RJ45 crimp jack.
- For brick wall mounting, a flush mount kit OD10 FB and a flush mount box OD10 FBS are required (available separately).
- For mounting details, see corresponding short reference of the mount kit.
- Do not install the Intercom station on unstable walls or on surfaces which cannot support the device's weight.
- Make sure the surface mount kit OD10 SH is not subject to torsional forces (e.g. on uneven walls).
- No water may penetrate into the surface mount kit OD10 SH or the flush mount kit OD10 FB.
- Use shielded Ethernet cables only.
- Before using the device, ensure all cables are correctly connected and not damaged.
- Use moistened microfibre cloths for cleaning the Intercom station.

### Safety instructions

- This Intercom station shall be installed or replaced by trained and qualified personnel only.
- Observe the country-specific standards for installation, mounting and configuration.
- Only use Comend accessories that comply with the Intercom station's technical specifications.
- The front of the Intercom station is made of glass. Do not use the Intercom station when the glass is damaged.
- Disconnect the Ethernet cable for any maintenance of the device.
- Do not make any modifications to the Intercom station.
- All connected circuits shall fulfil the following requirements:
  - Safety Extra Low Voltage (SELV) and Limited Power Source (LPS) according to IEC/EN 60950-1 or
  - ES1, PS2 circuits and Annex Q (Limited Power Source) according to IEC/EN/UL 62368-1
- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

### Recommended mounting height

The upper edge of the Intercom station shall be mounted approx. 1,650 mm (65 in) above the finished floor. Adapt the mounting height to the individual needs.



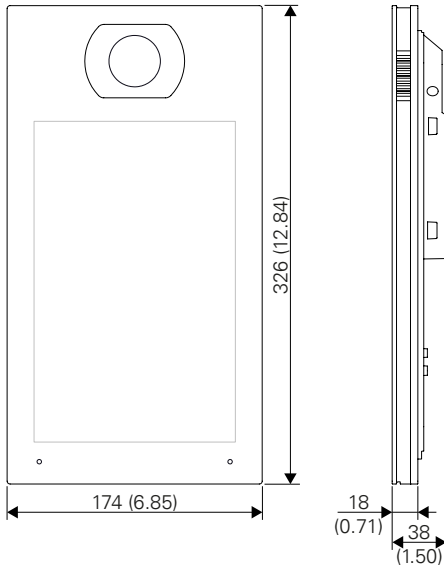
#### NOTE: Accessibility

- To provide barrier-free accessibility, it is recommended to mount the Intercom station with sufficient distance to walls or corners.
- When mounting the Intercom station OD10 TD CM, pay attention to the correct camera angle in terms of accessibility, so that wheelchair users and children can be detected by the camera: 123° (vertical) x 145° (horizontal)

Dimensions

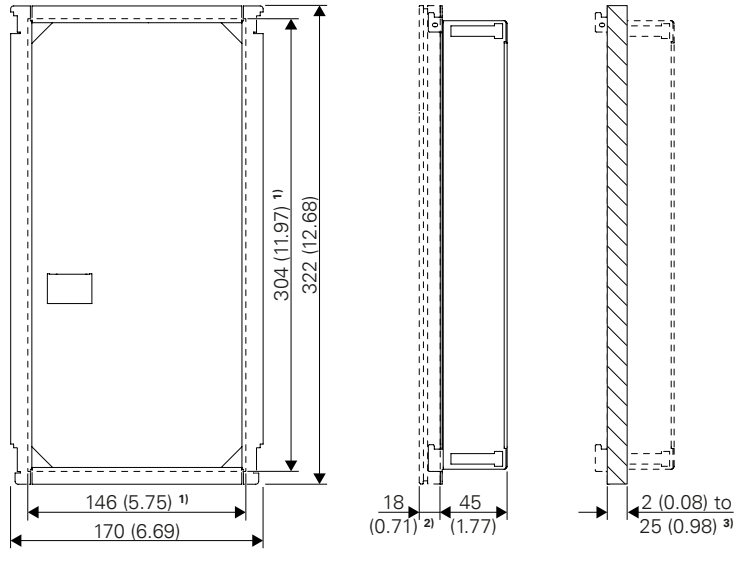
**OD10 TD CM**

Measuring units in mm (in), not to scale!



**Drywall/panel mount kit OD10 FB**

Measuring units in mm (in), not to scale!



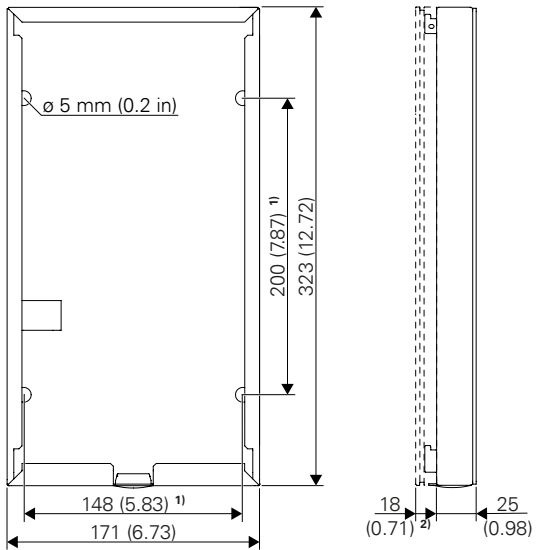
<sup>1)</sup> Cut-out for wall mounting

<sup>2)</sup> OD10 TD CM

<sup>3)</sup> Wall thickness

**Surface mount kit OD10 SH**

Measuring units in mm (in), not to scale!



<sup>1)</sup> Dimensions for mounting holes

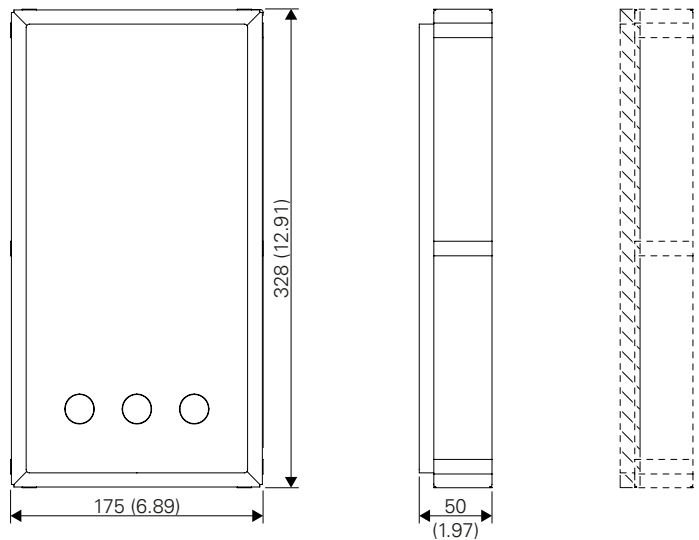
<sup>2)</sup> OD10 TD CM

**NOTE: Mounting on brick walls**

For mounting on brick walls, additionally the flush mount box OD10 FBS is required (not included in extent of supply).

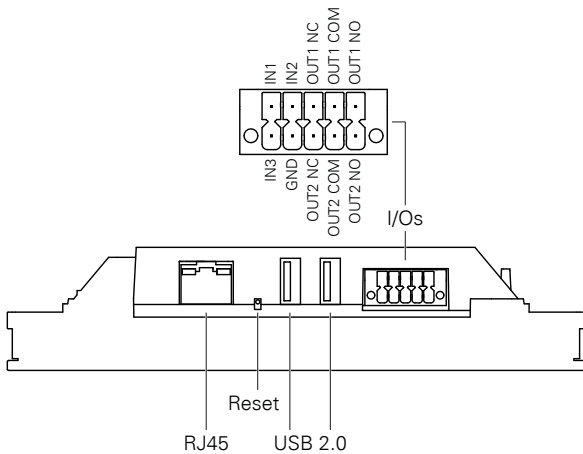
**Flush mount box OD10 FBS**

Measuring units in mm (in), not to scale!

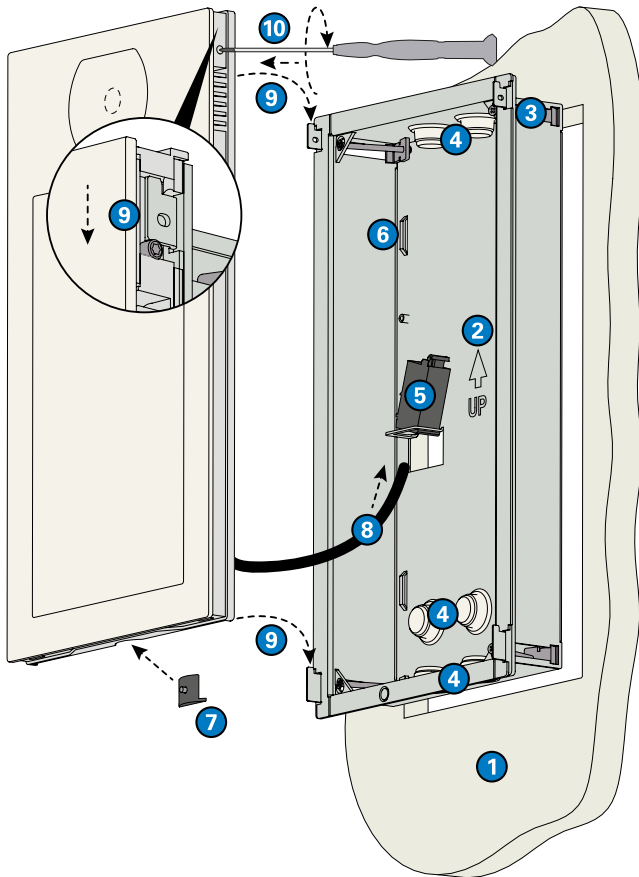




Connection



Wall mounting with OD10 FB



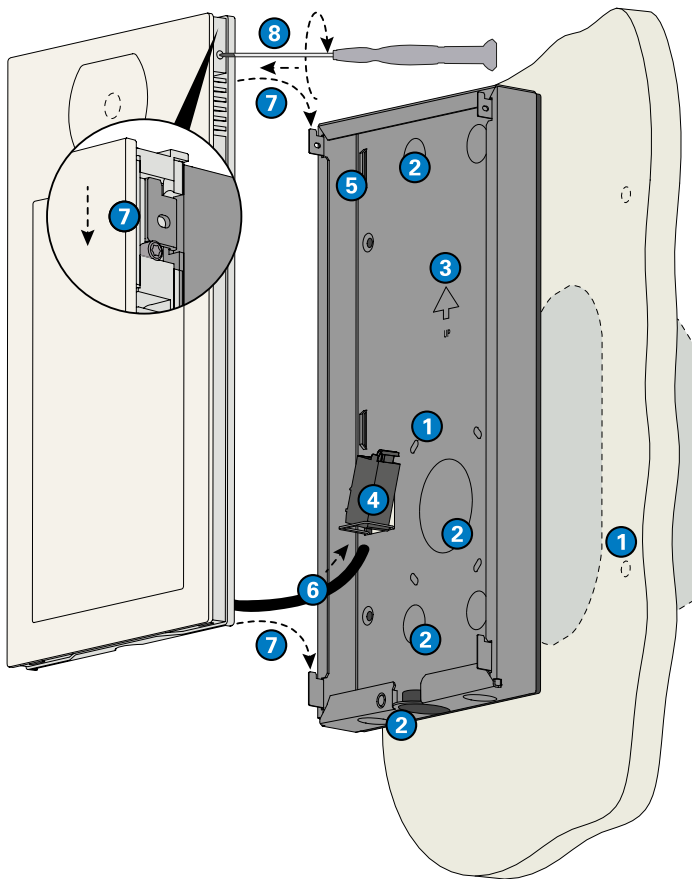
- 1 Cut out the wall (see "Dimensions").
- 2 Insert the mounting box onto the wall with the arrow pointing upwards.
- 3 Press the four claw clamps on the sides of the mounting box outwards and tighten them using the corresponding screws (TX 10).
- 4 Pierce one of the provided cable glands depending on cable supply (from top, bottom or rear). Guide the required cables through this entry (Ethernet, I/O and USB cable, if needed), run the cables along the corners of the mounting box and adjust them to the desired length.
- 5 Follow the enclosed instructions on how to mount the optional Ethernet socket RJ45-MONT to the cable and connect it to the station. Insert the Ethernet socket with its gib head on the right at the intended position and clip it on the left. OD10 FB is specifically designed to accommodate RJ45-MONT.
- 6 Fix the cables on the provided strain-relief using the cable ties included in extent of supply of the OD10 TD CM.
- 7 Attach the blind cover included in extent of supply to the bottom side of the Intercom station using a screwdriver (TX 10, not included in extent of supply).
- 8 Connect the cables to the Intercom station and the Ethernet socket (Ethernet, I/O and USB cable, if needed).
- 9 Place the Intercom station on the mounting box so that the Intercom station attaches to every hook. Press the Intercom station onto the mounting box and push it downwards to lock it.
- 10 Turn the two lateral locking screws clockwise out as far as it will go using the TX 08 screwdriver (included in extent of supply of the OD10 TD CM). Check whether the Intercom station is fixed on the mounting box.

**NOTE: Wall mounting**

- For mounting on brick walls, additionally the flush mount box OD10 FBS is required (not included in extent of supply). In this case, plaster the flush mount box OD10 FBS into the wall and then continue with 2.
- To ensure that the tamper detection functions correctly, the magnet in the lower part of the mounting box must not be covered, damaged or electromagnetically influenced.
- Due to the IP protection class requirements, considerable force may need to be applied when pressing the Intercom station onto the mounting box.



## Surface mounting with OD10 SH



- 1 Drill four holes into the wall and insert dowels (see "Dimensions"). Alternatively, break out the four small openings in the lower half of the mounting box in order to be able to screw the mounting box to a 2-fold flush-mounted box (no wall holes are required for this).
- 2 Break out one of the provided cable openings depending on cable supply (from bottom or rear).
- 3 Screw the mounting box to the wall or to the 2-fold flush-mounted box with the arrow pointing upwards. Guide the required cables through this entry (Ethernet, I/O and USB cable, if needed), run the cables along the corners of the mounting box and adjust them to the desired length.
- 4 Follow the enclosed instructions on how to mount the optional Ethernet socket RJ45-MONT to the cable and connect it to the station. Insert the Ethernet socket with its gib head on the left at the intended position and clip it on the right. OD10 SH is specifically designed to accommodate RJ45-MONT.
- 5 Fix the cables on the provided strain-relief using the cable ties included in extent of supply of the OD10 TD CM.
- 6 Connect the cables to the Intercom station and the Ethernet socket (Ethernet, I/O and USB cable, if needed).
- 7 Place the Intercom station on the mounting box so that the Intercom station attaches to every hook. Press the Intercom station onto the mounting box and push it downwards to lock it.
- 8 Turn the two lateral locking screws clockwise out as far as it will go using the TX 08 screwdriver (included in extent of supply of the OD10 TD CM). Check whether the Intercom station is fixed on the mounting box.

### NOTE: Wall mounting

- To ensure that the tamper detection functions correctly, the magnet in the lower part of the mounting box must not be covered, damaged or electromagnetically influenced.
- Due to the IP protection class requirements, considerable force may need to be applied when pressing the Intercom station onto the mounting box.

## 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 9001:2015**.



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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.

[www.commend.com](http://www.commend.com)