

PRA-CSLW Wallmount LCD call station

www.boschsecurity.com



BOSCH
Invented for life



- ▶ Wall mount housing with fixed hand-held microphone and helix cable
- ▶ Housing fits surface-mounting or flush-mounting
- ▶ 4.3" full-color capacitive touch screen
- ▶ Graphical user interface for optimum user guidance and feedback
- ▶ Status and fault indicators for voice alarm purposes

This call station for use in PRAESENSA Public Address and Voice Alarm systems is easy to install and intuitive to operate because of its touch screen LCD, providing clear user feedback about setting up a call and monitoring its progress, or controlling back ground music.

The call station allows for positioning without much effort, because it only requires a connection to an OMNEO IP-network with Power over Ethernet (PoE) for communication and power supply combined. It can be configured for use as business call station, but also as emergency call station.

The stylish design uses a heavy metal base with a recessed press-to-talk button and provides a hand-held omni-directional microphone to eliminate the proximity effect which creates a boomy sound when a user speaks close to the microphone. It has a built-in loudspeaker for call monitoring and a socket to connect a local background music source. It can be easily installed in a wall mount cabinet or flush mounted on a panel.

The 4.3" high-resolution full-color capacitive touch screen gives the operator optimum control and feedback at all times.

Every call station must have at least one PRA-CSE call station extension for zone selection, with a maximum of four extensions.

Functions

IP-network connection

- Direct connection to the IP-network. One shielded CAT5e cable is sufficient for Power over Ethernet, audio and control.
- For dual redundancy of network and power connection, a second shielded CAT5e cable can be connected.
- Integrated network switch with two OMNEO ports allows for loop-through connections to adjacent devices (at least one must provide PoE). Rapid Spanning Tree Protocol (RSTP) is supported to enable recovery from failing network links.

Business operation

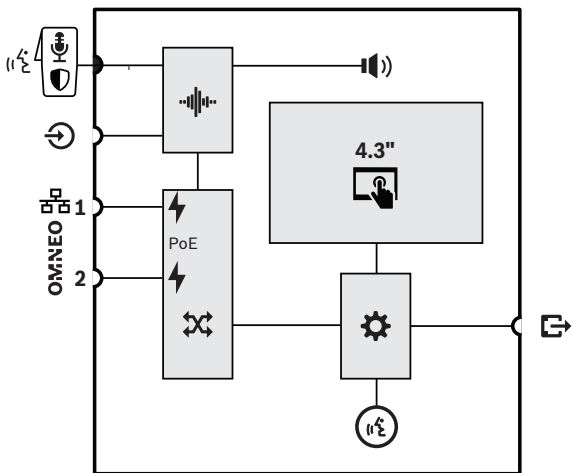
- Full color 4.3" capacitive touch screen with intuitive function menu navigation provides guidance and feedback during the process of live announcements, pre-recorded messages and music control. Successful broadcast of announcements/messages and changes to the background music settings are clearly indicated.
- Press-to-talk switch on hand-held microphone.

- Built-in monitor loudspeaker with volume control.
- Local audio line input (with stereo to mono conversion) for connecting an external audio source. The audio channel will be available on the network and can be played in any loudspeaker zone.
- Connection of up to four PRA-CSE extensions, each with twelve buttons. The buttons can be configured for various functions, but they are especially useful for zone selection, giving a clear overview of accessible zones and the LED indicators for each button show the status of the respective zone (like being selected, occupied or at fault).
- If the call station is not used for a while, it will switch to sleep mode to save energy. It will immediately wake up when the screen, or a button, is touched.

Emergency operation

- The call station fully complies to the standards for voice alarm applications when the firemen's user interface is configured and at least one PRA-CSE is connected to it.
- All critical alarm functions are accessible via buttons for operators wearing gloves. The 4.3" screen gives feedback on the system status.
- Each of the two RJ45 network connectors accept PoE to power the call station. This provides fail-safe network connection redundancy, as one connection is sufficient for full operation.
- Supervision of all critical elements; the audio path is supervised, as well as the communication to the network.

Connection and functional diagram



| | | | |
|--|--|--|------------------------|
| | Fixed hand-held microphone with Press-To-Talk or Start/Stop switch | | Audio processing (DSP) |
| | Internal monitor loudspeaker | | Power over Ethernet |
| | OMNEO network switch | | Controller |
| | Call/Microphone status LED-ring | | |

Top-side



Top-side indicators

| | | |
|--|---|-------------------------|
| | Power on Device in identification mode | Green Green blinking |
| | Device fault present | Yellow |
| | Status business call Microphone active Chime/message active | Green Green blinking |
| | Status emergency call Microphone active Alarm tone/message active | Red Red blinking |
| | 4.3" full-color capacitive touch screen | LCD |
| | Identification mode / Indicator test | All LED's blink |

Top-side controls

| | | |
|--|---|-------------------|
| | Fixed hand-held Press-To-Talk | Microphone Switch |
| | 4.3" full-color capacitive touch screen | LCD |

Bottom-side



Bottom-side indicators

| | | |
|--|--|-----------------|
| | 100 Mbps network 1-2 1 Gbps network 1-2 | Yellow Green |
|--|--|-----------------|

Bottom-side controls

| | | |
|--|-----------------------------------|--------|
| | Device reset (to factory default) | Button |
|--|-----------------------------------|--------|

Bottom-side and side interconnections

| | | |
|--|--------------------------------|--|
| | Network port 1-2 (PoE PD) | |
| | Local source audio line input | |
| | PRA-CSE interconnection (RJ12) | |

Architects' and engineers' specifications

The IP-networked wallmount call station shall be designed exclusively for use with Bosch PRAESENSA systems. The wallmount call station shall provide an interface for control data and multi-channel digital audio over OMNEO using dual Ethernet ports for redundant network connection, supporting RSTP and loop-through cabling. It shall receive Power over Ethernet (PoE) via either one or both network connections. The wallmount call station shall provide a backlit full-color capacitive touch panel LCD as user interface for business and evacuation purposes. The wallmount call station shall accept up to four optional call station extensions, each offering 12 configurable buttons for zone selection and other purposes. It shall provide control and routing of live speech calls, stored messages and music with volume control per zone. The wallmount call station shall have a hand-held

omnidirectional microphone for live calls and a 3.5 mm jack line level input for background music, and provide software-configurable signal processing including sensitivity control, parametric equalization and limiting. The wallmount call station shall be certified for EN 54-16 and ISO 7240-16, marked for CE and be compliant with the RoHS directive. Warranty shall be three years minimum. The wallmount call station shall be a Bosch PRA-CSLW.

Certifications and approvals

Emergency standard certifications

| | |
|---------------|-------------|
| Europe | EN 54-16 |
| International | ISO 7240-16 |

Regulatory areas

| | |
|-----------------------|---|
| Safety | EN/IEC/CSA/UL 62368-1 |
| Immunity | EN 55024 EN 55103-2 (E1, E2, E3) EN 50130-4 |
| Emissions | EN 55032 EN 61000-6-3 ICES-003 ANSI C63.4 FCC-47 part 15B class A |
| Environment | EN 50581 |
| Railway applications | EN 50121-4 |
| Maritime applications | DNV-GL Type Approval |

Conformity declarations

| | |
|------------------------|--------|
| Europe | CE/CPR |
| Australia | RCM |
| Morocco | CMIM |
| Russian Federation | EAC |
| United Arabic Emirates | CoC |

Parts included

| Quantity | Component |
|----------|--------------------------------------|
| 1 | Wallmount LCD call station |
| 1 | Bracket (attached to bottom) |
| 1 | Connector cover (attached to bottom) |
| 1 | Microphone clip |
| 1 | Quick Installation Guide |
| 1 | Safety information |

Technical specifications

| | PRA-CSLW Wallmount LCD call station |
|---|--|
| Operating voltage (VDC) | 37 - 57 VDC (PoE) |
| Power consumption (W) | 6,4 W maximum |
| Element type | Dynamic;Noise cancelling |
| Polar pattern | Unidirectional |
| Maximum sound pressure input level (dB SPL) | 120 dB SPL |
| Frequency response (Hz) (-10 dB) | 500 - 8000 Hz |
| Display type | LCD |
| Display resolution (pixels) | 480x272 px |
| Touchscreen | Capacitive |
| Audio input | line-in |
| Audio output | built-in loudspeaker |
| Number of Ethernet ports | 2 |
| Ethernet type | 100BASE-TX; 1000BASE-T |
| Protocols and interfaces | OMNEO;AES 70 |
| Sample rate (kHz) | 48 kHz |
| Protection | Watchdog;RSTP |
| Degree of protection (IEC 60529) | IP30 |
| Operating temperature (°C) | -5 - 50°C |
| Dimension (H x W x D mm) | 62 x 130 x 189 mm |
| Weight (kg) | 1 kg |

Electrical**Microphone (PRA-CSLW)**

| | |
|---|---------------------------------------|
| Nominal acoustic input level (configurable) | 85 to 105 dBSPL |
| Maximum acoustic input level | 120 dBSPL |
| Signal to Noise Ratio (SNR) | > 73 dBA |
| Directivity | Unidirectional |
| Frequency response (+3 / -6 dB) | 500 Hz to 8 kHz (noise cancelling) |

Display

| | |
|--------------|------------|
| Size | 4.3" |
| Touch screen | Capacitive |

Display

| | |
|-------------|-----------------------|
| Color depth | 24-bit |
| Resolution | 480 x 272 px |
| Brightness | 300 cd/m ² |

Monitor loudspeaker

| | |
|--------------------------------------|----------------------|
| Maximum sound pressure level, at 1 m | 75 dBSPL |
| Volume control | Mute, -40 dB to 0 dB |
| Frequency range (-10 dB) | 400 Hz to 10 kHz |

Line input

| | |
|---|----------|
| Signal to Noise Ratio (SNR) | > 96 dBA |
| Total Harmonic Distortion + Noise (THD+N) | < 0.1 % |

Power transfer

| | |
|--|---------------------------------|
| Power over Ethernet (PoE 1-2) Nominal DC input voltage Standard | 48 V IEEE 802.3af (mode B) |
| Power consumption Call station (general use) Call station (alarm use) Per call station extension (indicators off / on) | 4.2 W 5.4 W 0.1 W / 1.0 W |
| Input voltage tolerance | 37 to 57 VDC |

Supervision (PRA-CSLW)

| | |
|---|---|
| Supervision Microphone Audio path Press-to-talk switch Controller continuity PoE (1-2) | Impedance Pilot tone Impedance Watchdog Voltage |
|---|---|

Network interface

| | |
|---|---|
| Ethernet Protocol Redundancy | 100BASE-TX, 1000BASE-T TCP/IP RSTP |
| Audio/control protocol Network audio latency Audio data encryption Control data security | OMNEO 10 ms AES128 TLS |

| | |
|-------|---|
| Ports | 2 |
|-------|---|

Reliability

| | |
|--|-------------|
| MTBF (extrapolated from calculated MTBF of PRA-AD608) | 1.000.000 h |
|--|-------------|

Environmental**Climatic conditions**

| | |
|--|--|
| Temperature Operating | -5 to +50 °C (23 to 122 °F) |
| Storage and transport | -30 to +70 °C (-22 to 158 °F) |
| Humidity (non-condensing) | 5 to 95 % |
| Air pressure (operating) | 560 to 1070 hPa |
| Altitude (operating) | -500 to +5000 m (-1640 to 16404 ft) |
| Vibration (operating) Amplitude Acceleration | < 0.35 mm < 5 G |
| Bump (transport) | < 10 G |

Mechanical**Enclosure (PRA-CSLW)**

| | |
|--------------------|--|
| Dimensions (WxHxD) | 130 x 62 x 189 mm (5.12 x 2.44 x 7.44 in) |
| Ingress protection | IP30 |

Enclosure (PRA-CSLW)

| | |
|----------------------------|---------------------------------|
| Base Material Color | Zamak RAL9017 |
| Panel Material Color | Plastic RAL9017 RAL9022HR |
| Weight | 1.0 kg (2.21 lb) |

Ordering information**PRA-CSLW Wallmount LCD call station**

Network-connected, PoE powered, touch screen call station with hand-held microphone.

Order number **PRA-CSLW**

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com

North America:
Bosch Security Systems, LLC
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia