

## ET 862A



## 2-wire DSP Intercom module ET 862A

The digital 2-wire Intercom module ET 862A has been developed for installation in existing housings or for construction of special Intercoms. The DSP-technology is securely fitted in a rugged housing with mounting tabs for easy installation.

Applications for the Intercom module ET 862A are all kinds of call-/emergency call stations, where the station is built-in and only the external call button is used. This means special solutions for e.g. emergency call pillars, elevator cabins,

ticketing machines or barriers at entrances and exits can be created, that optimally satisfy function and optical appearance of the customer specifications.

The Intercom modules ET 862A are manufactured in DSP-technology, which enables functions such as Audio monitoring or loudspeaker/microphone surveillance. The modules are prepared for future download of new functions and can utilize the OpenDuplex® capability of the Intercom Servers.

### ET 862A

2-wire Intercom module in rugged build-in housing with DSP-technology. Connection possibility for 12 buttons with row/column matrix. Input for floating contacts. Output contact for direct connection of a door opener.

# Technical Data – Benefits

## TECHNICAL DATA

|                              |   |
|------------------------------|---|
| Keyboard:                    | possibility of connecting 12 buttons, with plug for row/column matrix   |
| Microphone:                  | omnidirectional electret condenser microphone for max. 7 m (23 ft) speaking distance  |
| Loudspeaker:                 | special membrane type for optimal sound quality, sound pressure: 85 dB/1 W/1 m (3.28 ft), 8 Ω   |
| Amplifier:                   | built-in amplifier 2.5 W<br>output power with built-in loudspeaker: 1.5 W   |
| Input:                       | 1 input for floating contacts, max. 1 kΩ (detection of 5 input states)  |
| Output <sup>1)</sup> :       | relay output (switch-over contact)<br>max. 60 W (DC)/37.5 VA (AC), max. 2 A,<br>max. 60 VDC/30 VAC,<br>expected life: min. 5 × 10 <sup>4</sup> (2 A), 10 <sup>5</sup> (1 A) |
| Call indication:             | multifunctional LED (colours: red, green, blue)   |
| Frequency range:             | 200 – 16,000 Hz   |
| Operating temperature range: | –20 °C to +70 °C<br>(–4 °F to 158 °F)   |
| Storage temperature range:   | –20 °C to +70 °C<br>(–4 °F to 158 °F)   |
| Relative humidity:           | up to 95 %  |
| Plug:                        | pluggable screw terminals<br>expansion plug for e.g. EB2E2AHE   |
| Cabling:                     | star feed, 2-wire, twisted  |
| Power supply:                | from Intercom Server<br>option <sup>1)</sup> : external power supply for greater line length (12–24 VAC or 15–35 VDC, 15 W)   |
| Signalling:                  | 2B + D (2 × 64 kBit/s speech, 16 kBit/s data)   |
| Dimensions (W x H x D):      | 87.5 x 109 x 40 mm<br>(3.45 x 4.29 x 1.58 in)   |
| Weight incl. package:        | 195 g (0.4 lbs)   |

<sup>1)</sup> All connected circuits must meet the following safety requirements:  
 1. Safety extra-low voltage (SELV) according to IEC/EN 60950-1 or  
 2. Circuits according to IEC/EN/UL 62368-1  
 2.1 ES1 for all connections.  
 2.2 PS1 for the power supply.  
 2.3 PS2 for the relay output.  
 A SELV/ES1 circuit must be safely separated from a dangerous electrical circuit (e.g. 230 V or 110 V mains power), e.g. by double insulation. The SELV circuit must not exceed 60 VDC or 42.4 VAC<sub>peak</sub> (30 VAC<sub>eff</sub>)!  
 The wiring of the PS2 circuits must meet the requirements of IEC 62368-1 chapter 6.5.

## EXTENT OF SUPPLY

- 1 Intercom module including:
- Light pipe and plexiglass LED cover, optionally as light guide for the multifunction-LED.
  - Short reference

## BENEFITS

- Excellent 16 kHz speech quality, even from a distance (up to 7 m/23 ft)
- Cabling with 2 wires, star feed, fully digital transmission of speech and data
- DSP-technology, prepared for software download of future functions
- Audio monitoring, adjustable integration time and noise level
- Loudspeaker/microphone surveillance
- Built-in loudspeaker and microphone
- Integrated amplifier with 2.5 W output
- Output contact for direct connection of e.g. doors or gates
- Connection of 12 buttons with row/column matrix
- Expansion via optional expansion boards (e.g. EB2E2A)

## SYSTEM REQUIREMENTS

- GE 800 (min. PRO 800 1.2) with G8-GED (G3-8-SUB min. 3.2) or
- GE 300 (min. PRO 800 1.2) with G3-GED (G3-8-SUB min. 3.2) or
- VirtuoSIS/S3/S6 with ET 901-D (min. firmware version 3.0)

## LINE LENGTH

| Cable type   | Power Supply Intercom Server |                   |                   |
|--|------------------------------|-------------------|-------------------|
|  | 24 V AC                      | 30 V DC           | 26 V DC           |
| Ethernet cable e.g. Cat. 5<br>Loop resistance: 190 Ω/km<br>Capacity: 48 nF/km                                  | 1500 m<br>4921 ft            | 1700 m<br>5577 ft | 1400 m<br>4593 ft |
| Telecommunication cable e.g. F-YAY;<br>ø 0,6/0,8 mm<br>Loop resistance: >135 / >73 Ω/km<br>Capacity: 100 nF/km | 1500 m<br>4921 ft            | 2100 m<br>6889 ft | 1500 m<br>4921 ft |
| External power supply  | max. 2800 m / 9186 ft        |                   |                   |

All values for connected loudspeaker ≥8 Ω and volume level 9.



# Installation

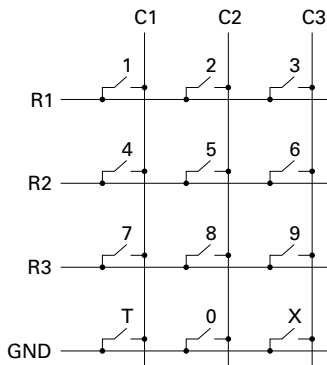
## SAFETY INSTRUCTIONS

- This device shall be installed or replaced by trained and qualified personnel only.
- Only use recommended tools when installing the device.
- Observe the country-specific standards for installation, mounting and configuration.
- Only accessories that comply with the device's technical specifications shall be used.
- Do not make any unauthorised modifications to the device.

## MOUNTING INSTRUCTIONS

- Do not expose the station to extreme temperature (below -20 °C or above +70 °C / -4 °F to 158 °F).
- Make sure that the front panel of the ET 862A is attached to the mounting plate without margin. Otherwise an "acoustic short circuit" occurs, which can considerably influence the sound quality of the ET 862A.

## KEYPAD MATRIX

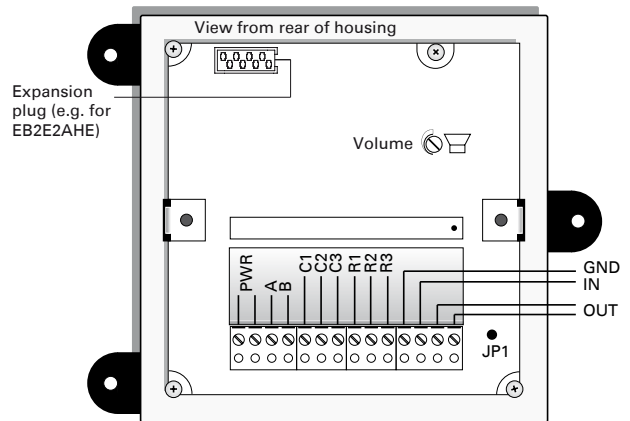


Line length between keypad and ET 862A: max. 50 cm (19.7 in)

## CONNECTION

### Optional

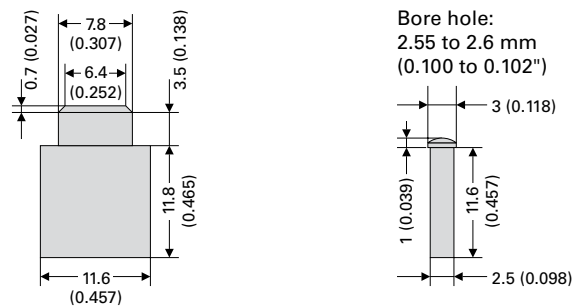
Terminals PWR: external, floating power supply for greater line length (12 - 24 VAC or 15 - 35 VDC, 15 W).



### Note

OUT factory adjusted as normally open contact. With the jumper JP1 (inside of housing) it can be converted into a normally closed contact.

## LIGHT GUIDE FOR CONVERSATION-LED



### Plexiglass LED Cover

### Light Pipe

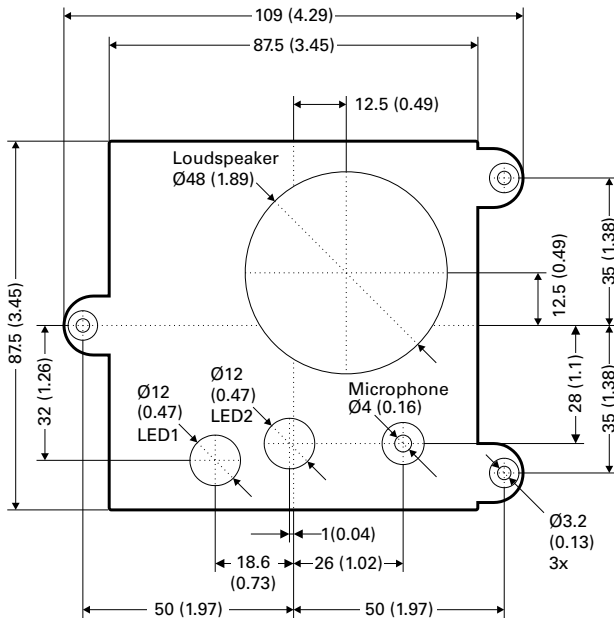
The plexiglass LED cover only fits LED 2 (see "Dimensions"). For call indication either LED 1 or LED 2 can be used. LED 1 is in the same position as the LED of the 4-wire Intercom module ET 562.



# Installation

## DIMENSIONS

Measuring units in mm (in), not scale!



### QUALITY TESTED. RELIABLE. SMART.

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The development and manufacturing processes are certified in accordance with **EN ISO 9001:2015**.

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