

# Heavy Industrial Stations

## EE 8000

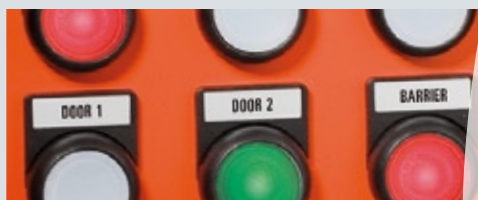
Perfect communication in rough environments.



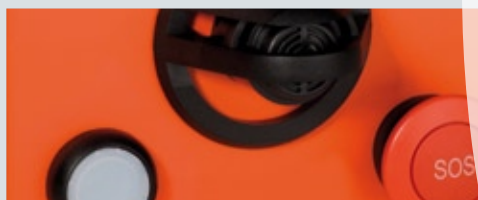
### The Series 8000 proves it's strengths when employed in rough industrial areas.

The DSP-technology of the terminals is built into extremely tough housing components made of polyester reinforced with fibreglass.

Powerful features provide perfect communication in all industrial applications.



Buttons with two-colour LEDs



Microphone sensitivity adjustable

### FEATURES AND BENEFITS

- Digital 2-wire technology
- Crystal clear 7 kHz speech quality for optimum intelligibility
- 25 W speech power
- Volume level adjustable according to noise
- Adjustable microphone sensitivity
- Rugged construction – IP 65 rated
- Housing reinforced with fibreglass
- Buttons with two-colour LEDs
- Supports functions like OpenDuplex®, Audio-Monitoring, Loudspeaker-/Microphone Surveillance, etc.
- Connection possibility for handset



SECURITY AND COMMUNICATION

The right terminal for every application

## 2-WIRE INDUSTRIAL STATIONS EE 8000

Industrial stations in DSP-technology with OpenDuplex® for optimal speech communication in rough industrial environments.

The industrial stations are made of extremely rugged polyester reinforced with fibreglass in high-visibility bright orange (RAL 2004). The housing has additional shock absorber trims on each sides. Large buttons enable operation with protective gloves. Buttons with two-colour LEDs (red, green - steady or blinking) can be used for status indication (inputs, outputs, conversations, call requests, etc.). All buttons of the stations are fully programmable or can be assigned to predefined functions. Connection possibility for a handset. Two relays on the base PCB can be assigned with various functions. The DSP-technology enables additional functions, such as e.g. OpenDuplex®,

Loudspeaker-/Microphone Surveillance or Audio-Monitoring. Future functions can easily be added via software update.

**Technical Data:** IP-rating IP 65; Fire protection classification V0 according to UL; power supply 24 – 42 V AC/40 VA or 22 – 60 V DC/40 W; built-in Class „D“ amplifier with 25 W speech power; loudspeaker with special membrane type for optimal sound quality; 2 floating relay outputs (30 V/3 A) and 2 inputs for floating contacts. Microphone sensitivity adjustable in a range of 30 dB; speaking distance adjustable 3 cm to 5 m (dependent on ambient noise and microphone sensitivity); ambient noise level up to max. 95 dBA. Industrial push button with micro-switch.

### EE 8158M

Industrial master station with 6 programmable LED direct dialling buttons, integrated loudspeaker, universal microphone and 2 programmable LED-buttons. The DSP allows a characteristic of a noise-cancelling as well as an electret microphone. Button labels are included for description of the direct dialling button functions.

**Typical applications:** Heavy industry, tunnels, chemical industry, cement factories and quarries, mines, etc.

Measurements: W 177 mm, H 318 mm, D 142 mm (without cable glands)

Weight: ca. 3,200 g



### EE 8148M

Industrial master station with 6 programmable direct dialling buttons, integrated loudspeaker, universal microphone and 2 programmable LED-buttons. The DSP allows a characteristic of a noise-cancelling as well as an electret microphone. Button labels are included for description of the direct dialling button functions.

**Typical applications:** Heavy industry, tunnels, chemical industry, cement factories and quarries, mines, etc.

Measurements: W 177 mm, H 318 mm, D 142 mm (without cable glands)

Weight: ca. 3,200 g



### EE 8238M

Industrial master station with a programmable full keypad, universal microphone, and 2 programmable LED-buttons. The DSP allows a characteristic of a noise-cancelling as well as an electret microphone. External loudspeaker required.

**Typical applications:** Heavy industry, tunnels, chemical industry, cement factories and quarries, mines, etc.

Measurements: W 177 mm, H 318 mm, D 142 mm (without cable glands)

Weight: ca. 2,900 g



### EE 81ADMSOS

Industrial sub-station with "SOS" print, integrated loudspeaker, universal microphone, LED-button and a large red mushroom button with "SOS" print. Both buttons can be programmed to various functions. The DSP allows a characteristic of a noise-cancelling as well as an electret microphone. Without lateral expansion openings.

**Typical applications:** A rugged emergency call station for public areas and tunnels.

Measurements: W 175 mm, H 318 mm, D 142 mm (without cable glands)

Weight: ca. 3,100 g



Flexible extension possibilities

## MODULE PROGRAMME EE 8000

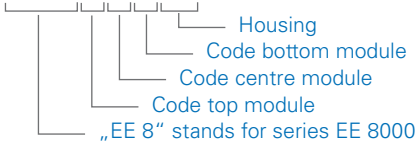
The modular concept of this system allows a flexible, customer specific configuration of digital heavy industrial stations. There are modules for

dialling, modules with inscribable direct dialling buttons, microphone modules and a loudspeaker module.

### Module code

The module code compositions consist of the following elements:

**EE 8 1 5 8 M**



See datasheet EE 8000 for possible module positions.

### Combinations

The industrial stations can be combined horizontally and vertically (mounting material EE 8999-KIT).



The base

## BASIC AND EXPANSION HOUSINGS

One basic and two expansion housings can be combined. This way industrial stations with up to 50 freely programmable direct dialling

buttons can be configured. The modules are connected to the PCB of the housing and can be combined as desired.

### EE 8999M

Basic housing with three module slots, includes electronics, with expansion openings and covers. Also available as empty housing (EDI 600, code "E") without electronics.

Measurements: W 177 mm, H 318 mm, D 122 mm (without cable glands)  
Weight: ca. 2,300 g



Code  
M

### EE 8999MSOS

Basic housing with three module slots, includes electronics, with "SOS" print on both sides (therefore no expansion openings on the sides).

Measurements: W 175 mm, H 318 mm, D 122 mm (without cable glands)  
Weight: ca. 2,300 g



Code  
MSOS

### EE 8999S






Expansion housing with three module slots, includes electronics, with expansion openings and covers. Up to two expansion housings can be combined with one basic housing. The cabling, also for multiple housings, is done with only 2 wires to the central and 2 wires to the power supply. Mounting material (EE 8999-KIT) for expansion housing is available separately.

Measurements: W 177 mm, H 318 mm, D 122 mm (without cable glands)  
Weight: ca. 2,300 g



Code  
S

## MODULES

			Code
<b>EM 600</b>	Dummy module to fill empty module slots or for fitting of customer specific buttons.		<b>0</b>
<b>EM 6A0</b>	Dummy module with "SOS" print to fill empty module slots.		<b>A</b>
<b>EM 650</b>	Loudspeaker module for industrial stations. The loudspeaker features high sound pressure and excellent intelligibility of speech. 15 W output power; sound pressure 92 dB/1 W/1 m/1 kHz; impedance 8 Ohm		<b>1</b>
<b>EM 602</b>	Keypad module with buttons 1 to 6 as part of a full keypad. The buttons can be programmed with various functions. Industrial push button with micro-switch.		<b>2</b>
<b>EM 603</b>	Keypad module with buttons 7 to X as part of a full keypad. The buttons can be programmed with various functions. Industrial push button with micro-switch.		<b>3</b>
<b>EM 606</b>	Keypad module with 6 direct dialling buttons that can be custom-labelled. The buttons can be programmed with various functions. For labelling of the buttons exchangeable tags are included. Industrial push button with micro-switch.		<b>4</b>
<b>EM 605</b>	Keypad module with 6 direct dialling LED buttons that can be custom-labelled. The buttons can be programmed with various functions. For labelling of the buttons exchangeable tags are included. Industrial push button with micro-switch.		<b>5</b>
<b>EM 660</b>	Microphone module with electret microphone for areas with normal to medium ambient noise levels. The two buttons can be programmed with various functions. Button labels "L" and "X" are included in extent of supply.		<b>6</b>
<b>EM 680</b>	Microphone module with electret microphone and 2 LED buttons. The two buttons can be programmed with various functions. Button labels "L" and "X" are included in extent of supply.		<b>8</b>
<b>EM 681</b>	Microphone module with electret microphone, 1 LED button and 1 big red mushroom button marked "SOS". The two buttons can be programmed with various functions. Button labels "L" and "X" are included in extent of supply.		<b>D</b>
<b>EM 6B0</b>	Microphone module with electret microphone, white conversation lamp and big red mushroom button marked "SOS". The button can be programmed with various functions.		<b>B</b>

### Microphone characteristics

EM 680, EM 681 und EM 660, EM 6B0 as universal microphone in 2-wire basic housing EE 8999M

DSP-technology facilitates a single microphone with both omnidirectional and noise cancelling characteristics. Microphone sensitivity adjustable in a range of 30 dB; speaking distance adjustable 3 cm to 5 m (dependent

on ambient noise and microphone sensitivity adjusted); ambient noise level up to max. 95 dBA.

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