

## Series WS 800V D



## Digital Wallmount Stations Series WS 800V D

These vandal-resistant Intercom stations have many uses. In public areas they serve as information and help points for passers-by to request help and receive assistance in cases of emergency. The technology ensures excellent speech quality and clarity, regardless of the ambient noise level. Continuous monitoring function ensures reliable availability around the clock. The durable high-grade steel front plates with poke protection and special screws provide protection against

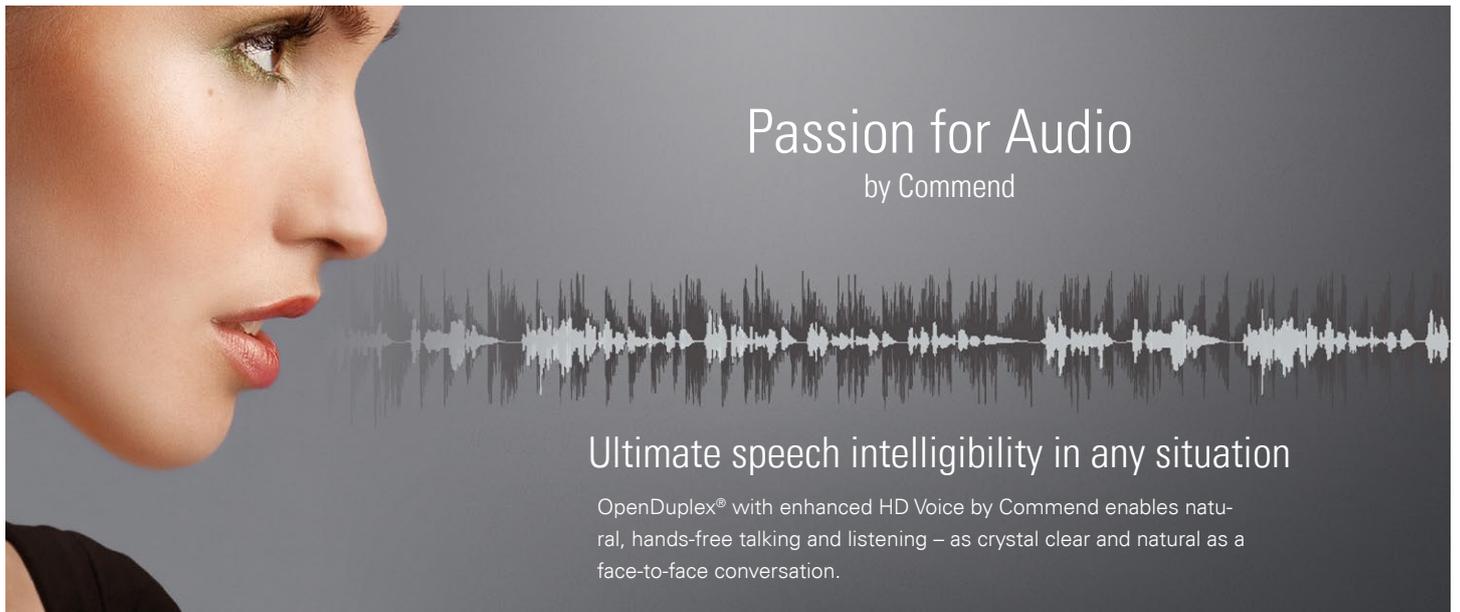
vandalism. The compact construction is fully protected against water jets, dirt and dust. The extra large emergency call buttons are easily visible even distance and activate easily and reliably.

### Typical applications:

Public foyers, Parking lots and garages, Leisure facilities, Schools and universities

### WS 800VD

Digital station with LCD graphic display with white backlight, back-lit alphanumeric standard keypad, function buttons, omnidirectional electret condenser microphone with multifunction LED, loudspeakers 2 x 8 Ω, 3 inputs for floating contacts and 2 relay outputs, protection classification IP66 and IK07, material stainless steel.

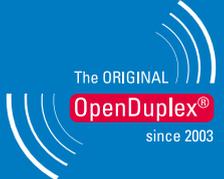


## Passion for Audio

by Commend

### Ultimate speech intelligibility in any situation

OpenDuplex® with enhanced HD Voice by Commend enables natural, hands-free talking and listening – as crystal clear and natural as a face-to-face conversation.

 <p>Natural communication</p>	 <p>enhanced HD Voice</p>	 <p>High volume</p>	<p>IVC</p> <p>Intelligent Volume Control</p>	 <p>Loudspeaker / microphone surveillance</p>
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## AUDIO FACTS

- **eHD Voice** – enhanced HD Voice by Commend transfers the audio signal at a bandwidth of **16 kHz**, thus capturing the entire frequency spectrum of the human voice
- **STI** (Speech Transmission Index) **0.96** – measured under acoustic laboratory conditions (STI is a standard measure for speech intelligibility. It has a possible maximum value of 1.00, which corresponds to perfect intelligibility)
- **Loudspeaker/microphone monitoring** – ensures the availability of the Intercom station while reducing the need for manual verification of its functionality
- **Audio monitoring** – fully automated emergency calls triggered by shouting/screaming or pre-defined distress sounds – i.e., more security for users
- **Audio recording** and lip synchronous audio/video recording of conversations for documentation and evidence keeping purposes
- **Conference call function** for simultaneous talking with multiple conversation partners
- **Speech activity detection** senses when calls are finished (no microphone signal) and terminates the connection automatically
- **Simplex mode** for applications requiring controlled communication – e.g., security solutions based on the 'push-to-talk/release-to-listen' method
- **OpenDuplex®** for natural for natural, hands-free communication
- **IVC** (Intelligent Volume Control) automatically adjusts the device's volume setting to the ambient noise level
- **Public Address functions**

Learn more

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



# Technical Data – Benefits

## TECHNICAL DATA

IP rating acc. EN 60529:	IP66
Mechanical impact resistance acc. EN 62262:	IK07
Front panel:	1.4301/AISI 304, 3 mm (0.12 in)
Microphone:	electret condenser microphone polar pattern: omnidirectional
Loudspeaker:	special membrane type for optimal sound quality, sound pressure level: 85 dB/1 W/1 m (3.28 ft), 2 x 8 Ω
Amplifier:	integrated class-D amplifier with 2.5 W
Sound pressure level:	max. 99 dB
Handset, Headset:	EM sensitivity: 14 mV <sub>eff</sub> EM impedance: 3.3 kΩ / EM supply: 2.5 V EP level: 850 mV <sub>eff</sub> at 0 dBm0 / EP impedance: 200 Ω
Input:	3 inputs for floating contacts (detection of 5 input states)
Output:	2 relay outputs (switch-over contacts) max. 60 VDC, 2 A, 60 W <sup>1)</sup> expected life: min. 5 x 10 <sup>4</sup> (2 A), 10 <sup>5</sup> (1 A)
Line output:	for connection loudspeaker module
Call indication:	multifunction LED (colours: red, green, blue)
Keypad:	alphanumeric full keypad, white backlight activation force: 3 N, 1 x 10 <sup>6</sup> cycles
Display:	Mono-LCD display, 128 x 64 pixel, white backlight
Transmission bandwidth:	16 kHz
Operating temperature range:	-20 °C to 70 °C (-4 °F to 158 °F)
Storage temperature range:	-20 °C to 70 °C (-4 °F to 158 °F)
Relative humidity:	up to 95%, not condensing
Connection:	pluggable screw terminals expansion plug for e.g. EB2E2AHE
Power supply:	from Intercom Server or external supply 12–24 VAC or 15–35 VDC power consumption: max. 4 W
<b>Attention:</b>	
<ul style="list-style-type: none"> <li>The operation of the keypad backlight is available with external power supply only!</li> <li>For further information see "Line Length".</li> </ul>	
Cabling:	star feed, 2-wired, twisted
Signalling:	2B + D (2 x 64 kBit/s speech, 16 kBit/s data)
Mounting:	flush mount kit WSFB 50V surface mount kit WSSH 50V
Dimensions (W x H x D):	with flush mount kit: 164 x 279 x 14 mm (6.46 x 10.98 x 0.55 in) with surface mount kit: 164 x 279 x 50 mm (6.46 x 10.98 x 1.97 in)
Weight incl. package:	1.300 g (2.9 lbs)

<sup>1)</sup> The relay output may only be connected to a SELV circuit! 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 SELV circuit must not exceed 60 VDC or 42.4 VAC<sub>peak</sub> (30 VAC<sub>eff</sub>)!

## EXTENT OF SUPPLY

- Intercom station incl. short reference & screws for mounting

## BENEFITS

- Vandal-resistant
- Mono-LCD display
- Full keypad and function buttons (back-lit)
- IP rating IP66 and mechanical impact resistance IK07

## LINE LENGTH

The indicated line length is valid for standard stations without connected expansion modules.

### GE 800/GE 300

Cable type	Power Supply Server		
	24 VAC	30 VDC	26 VDC
Ethernet cable e.g. Cat. 5 Loop resistance: 125 Ω/km Capacity: 44 nF/km (13.4 nf/1000 ft)	900 m 2,953 ft <sup>*1</sup>	900 m 2,953 ft <sup>*1</sup>	650 m 2,133 ft <sup>*1</sup>
	750 m 2,460 ft <sup>*2</sup>	700 m 2,297 ft <sup>*2</sup>	–
Telecommunication cable e.g. F-YAY; ø 0.6 mm; AWG: 22 Loop resistance: 133 Ω/km Capacity: 100 nF/km (30.5 nf/1,000 ft)	900 m 2,953 ft <sup>*1</sup>	900 m 2,953 ft <sup>*1</sup>	600 m 1,969 ft <sup>*1</sup>
	750 m 2,460 ft <sup>*2</sup>	650 m 2,133 ft <sup>*2</sup>	–
External Power Supply:	max. 2,800 m/9,186 ft <sup>*4</sup>		

### GE 700/GE 200

Cable type	Power Supply Server		
	24 VAC	30 VDC	26 VDC
Ethernet cable e.g. Cat. 5 Loop resistance: 125 Ω/km Capacity: 44 nF/km (13.4 nf/1,000 ft)	850 m 2,789 ft <sup>*1</sup>	800 m 2,625 ft <sup>*1</sup>	–
	700 m 2,297 ft <sup>*2</sup>	650 m 2,133 ft <sup>*2</sup>	–
	1,600 m 5,249 ft <sup>*3</sup>	1,250 m 4,101 ft <sup>*3</sup>	850 m 2,789 ft <sup>*3</sup>
Telecommunication cable e.g. F-YAY; ø 0.6 mm; AWG: 22 Loop resistance: 133 Ω/km Capacity: 100 nF/km (30.5 nf/1,000 ft)	800 m 2,625 ft <sup>*1</sup>	750 m 2,460 ft <sup>*1</sup>	–
	650 m 2,133 ft <sup>*2</sup>	600 m 1,969 ft <sup>*2</sup>	–
	1,250 m 4,101 ft <sup>*3</sup>	1,250 m 4,101 ft <sup>*3</sup>	800 m 2,625 ft <sup>*3</sup>
External Power Supply:	max. 2,800 m/9,186 ft <sup>*4</sup>		

- <sup>\*1</sup>... with volume level 9; no display backlight
- <sup>\*2</sup>... with volume level 9; max. display backlight
- <sup>\*3</sup>... with volume level 8; no display backlight
- <sup>\*4</sup>... with full scope of operation

## SYSTEM REQUIREMENTS

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



# Installation

## SAFETY INSTRUCTIONS

- When opening the stations ESD precautions must be observed.
- The stations may only be opened by authorised service engineers.

## CONFIGURATION CCT

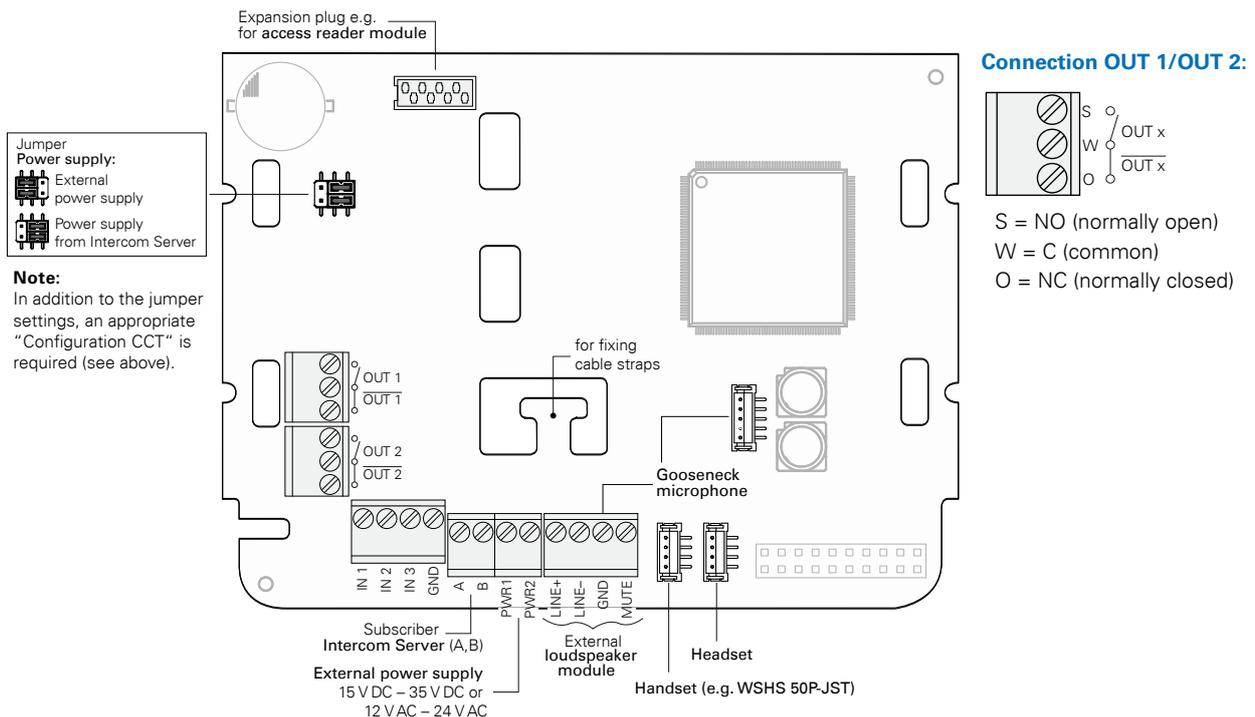
### Use of 2 relay outputs at GE 700/GE 200:

- To be able to use both relay outputs at a GE 700/GE 200 Intercom Server, the station type "EE342" or "EE342A" has to be configured for the WS station via the configuration software CCT at "Station properties".
- Thus, the relay outputs "OUT 1" and "OUT 2" can be activated at "Station properties" – "EE342".

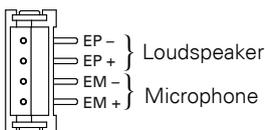
### External power supply / Keypad backlight:

- For an external power supply of the station, the checkbox "External power supply" has to be activated via the configuration software CCT 800 at "Subscriber" – "Station properties" – "WS series" – "WS 800"; tab "Display, Keypad, General" (in addition to the jumper settings described at "Connection").
- The configuration of the keypad backlight is only possible with external power supply. This means the checkbox "External power supply" must be activated!

## CONNECTION

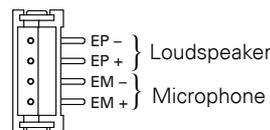


### Connection headset:



**Note:** The headset socket has to be activated via an ICX message (see below).

### Connection headset:



### ICX message for connection headset:

Microphone / loudspeaker	Task	Type	Data (variable length)	Server-SW
Switchover microphone / loudspeaker (subscriber)	40	92	TTTT 050Z	Pro 800 2.1

Variable TTTT → 4-digit call number of the subscriber

Variable Z → 0 = deactivate; 1 = activate; 2 = toggle



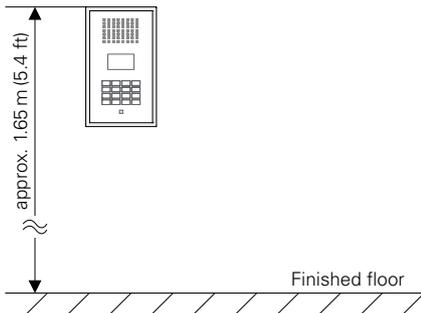
# Installation

## MOUNTING INSTRUCTIONS

- Do not expose the station to extreme temperature (below  $-20\text{ }^{\circ}\text{C}$  or above  $+70\text{ }^{\circ}\text{C}$  /  $-4\text{ }^{\circ}\text{F}$  to  $158\text{ }^{\circ}\text{F}$ ).
- For flush mounting a flush mount kit WSFB 50V (available separately) is required.
- For surface mounting a surface mount kit WSSH 50V (available separately) is required.

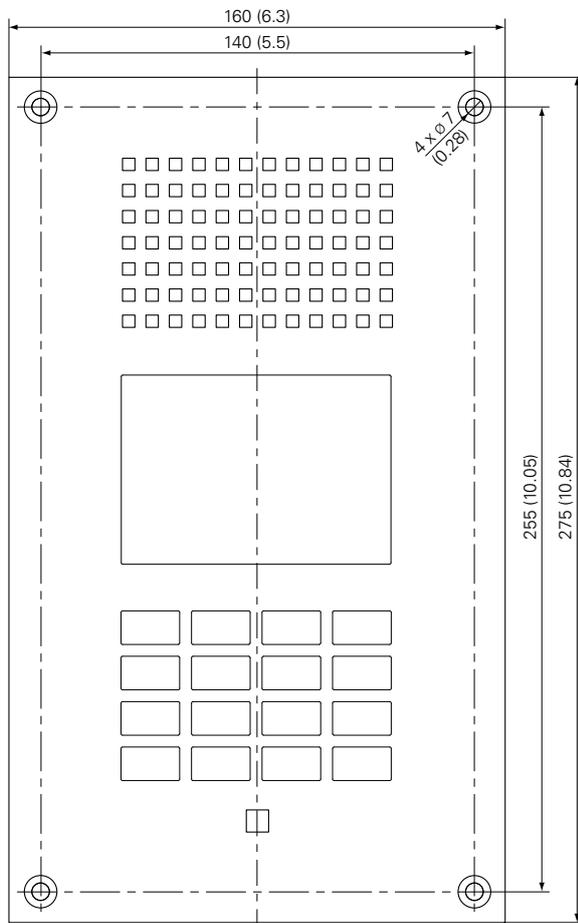
### Recommended Mounting height

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



## DIMENSIONS FRONT PANEL

Front panel thickness: 3 mm (0.12") / Measuring units in mm (inch), not scale!



## 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 the world over by local Commend Partners and helps to improve security and communication with tailored solutions.

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