

Series WS 800V I



IP Wallmount Stations Series WS 800V I

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

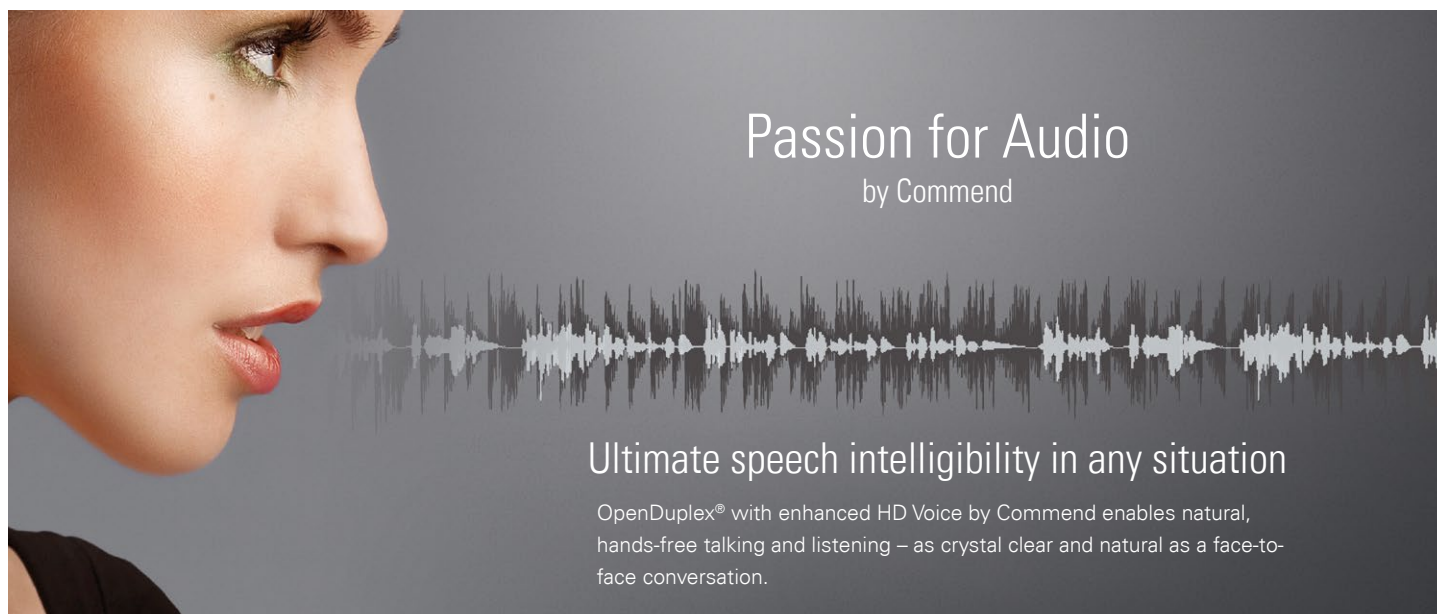
vandalism. The compact construction is fully protected against water jets, dirt and dust. The extra large emergency call buttons are easily visible even distance and activate easily and reliably.

Typical applications:

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

WS 800V I

IP 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 (connection as "make" or "break" contact), protection classification IP66 and IK07, material stainless steel.

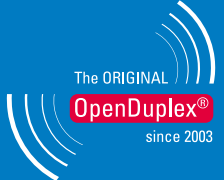





Passion for Audio

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
- **Peer2Peer audio** – reduces network and server load to ensure efficient use of resources
- **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



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 speaking distance: max. 7 m (23 ft)
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 _{eff} EM impedance: 3.3 kΩ / EM supply: 2.5 V EP level: 850 mV _{eff} 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 ¹⁾ expected life: min. 5 x 10 ⁴ (2 A), 10 ⁵ (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 ⁸ 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 IP Uplink: shielded RJ45 modular jacks
Power supply:	PoE or external supply 12–24 VAC or 15–35 VDC power consumption: max. 4.6 W
Cabling:	min. Cat. 5
PoE (Power over Ethernet):	IEEE 802.3af standard power consumption of the terminal device: Class 0 (0.44 W to 12.95 W)
Protocol:	IoIP-Protocol based on UDP/IP
Data rate:	10/100 MBit/s (Full/Half Duplex)
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)

¹⁾ 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_{peak} (30 VAC_{eff})!

BENEFITS

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

LINE LENGTH

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

EXTENT OF SUPPLY

- Intercom station
- Short reference
- Screws for mounting

System/Network Requirements

SYSTEM REQUIREMENTS

- GE 800 (min. PRO 800 1.2) with G8-IP (min. G3-8-IP 4.0b01) or
- GE 300 (min. PRO 800 1.2) with G3-IP (min. G3-8-IP 4.0b01) or
- VirtuoSIS/S3/S6
- Configuration software min. CCT 800 1.2
- Configuration software IP Station Config (included in setup of CCT 800 1.2)

REQUIREMENTS TO THE NETWORK

IP Addresses and Ports

- For the WS 800 I the DHCP functionality is available.
If DHCP is not used, the WS 800 I must have a fixed IP address.
- In case of a changing public IP address, dynamic registration of a WS 800 I is possible.
- Communication from the program IP Station Config is done via Port 16399 (can not be configured).
- Communication from the WS 800 I to the Intercom Server (UDP protocol) is done via port 16400 (configurable).

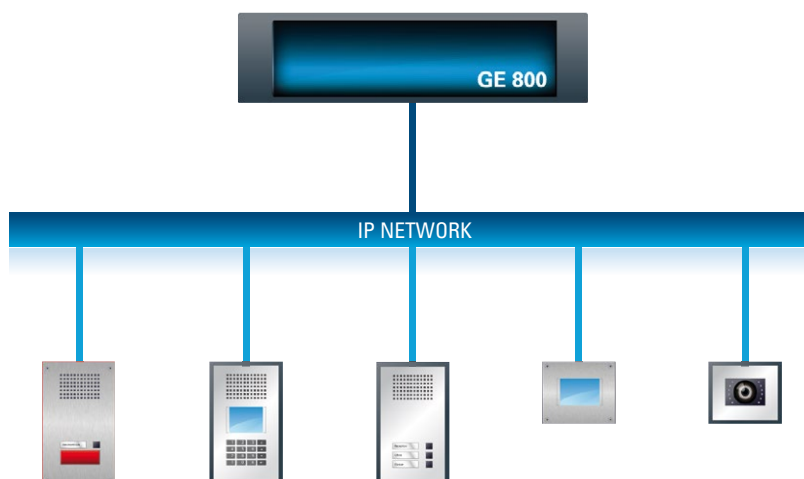
QoS Requirements

- Maximum One-Way-Delay 100ms
- Delay-Jitter not above 50ms
- 0% packet loss for perfect audio quality

Bandwidth

- Required Bandwidth incl. protocol overhead per WS 800 I, for upload/download each: speech and data 96 kBit/s
- Speech is compressed according to G.722 standard

SYSTEM OVERVIEW

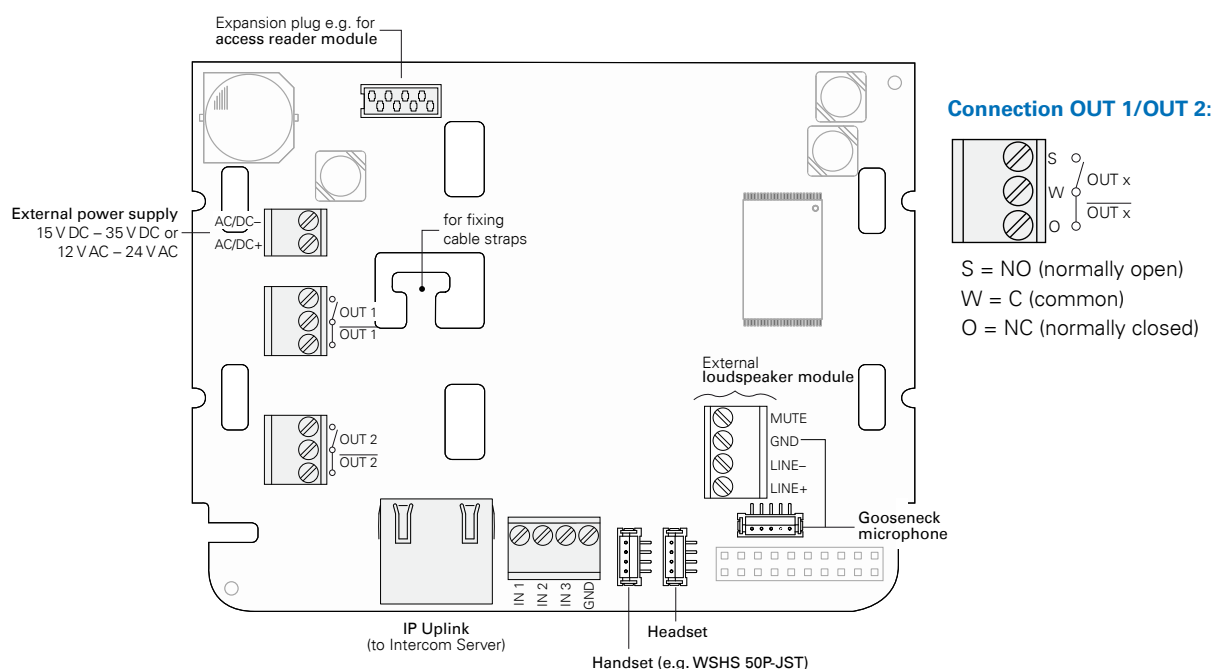


Installation

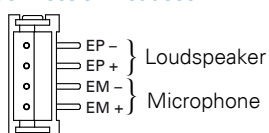
SAFETY INSTRUCTIONS

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

CONNECTION

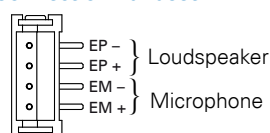


Connection headset:



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

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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