



ONBOARD **ANNOUNCEMENT PANEL**

Audio Announcement System for Public Transport



DESCRIPTION OF THE DEVICE

The Onboard Announcement Panel is designed for installation inside railway vehicles or carriages. It is a component of the public address system used for delivering voice announcements.

The messages can be broadcast either via the automatic announcement system installed in the vehicle or directly from the panel itself.

FEATURES AND FUNCTIONS

- ✓ Broadcasting multimedia content in Broadcast Mode
- ✓ Transmitting announcements from the Onboard Announcement Panel to the carriage/trainset
- ✓ Enabling internal voice calls between Onboard Announcement Panels
- ✓ Establishing voice calls with an external control center
- ✓ Establishing voice calls with the driver's cab
- ✓ Adjustable volume level for delivered announcements
- ✓ Voice communication via UIC558 or ETB line
- ✓ Remote configuration capabilities
- ✓ Integrated diagnostics protocol

POWER SUPPLY

Nominal supply voltage	+ 24 V DC
Permissible supply voltage range	+ 16,8 ÷ + 31,2 V DC ^[1]
Maximum power consumption	100 W ^[2]
Ingress protection rating	IP 20

CAN

Number of interfaces	1
Data transmission speed	500 kb/s
Terminating resistor	120 Ω (configurable)
Galvanic isolation	Yes ^[4]

SPEAKER OUTPUTS

Number of speaker outputs	2 (no. 1 and 2)
Output power	2 x 20 W
Output voltage	100 V
Frequency response	200 ÷ 12000 Hz
Number of speaker outputs	1 (no. 3)
Output power	1 x 2.2 W (4 Ω speaker)
Speaker impedance	min 4 Ω

RELAY OUTPUTS

Number of outputs	2
Output type	NC contact
Resistance	< 1 Ω
Permissible load	60 V / 0.2 A ^[8]
Galvanic isolation	Yes ^[9]

BISTABLE INPUTS

Number of inputs	2 (no. 3 and 4)
Input current	5 mA at 24 V
Switching voltage	7 V
Galvanic isolation	Yes ^[10]
Number of inputs	3 (no. 1, 2 and 5)
Input current	10 mA at 24 V
Switching voltage	7 V
Galvanic isolation	Yes ^[11]

ETHERNET

Number of interfaces	1
Data transmission speed	10/100 Mb/s
Standard	10Base-T, 100Base-T
Connector type	M12, D-coded
Galvanic isolation	Yes ^[3]

UIC568

UIC 1-2	Yes
Input current	5 mA at 24 V
Output current	1.3 A ^[5]
UIC 3-4	Yes
Input current	5 mA at 24 V
Output resistance	200 Ω
UIC 5-6	Yes
Input current	5 mA at 24 V
Output current	1.3 A ^[6]
UIC 7-8	Yes
Input current	5 mA at 24 V
Output current	1.3 A ^[7]

LINE INPUTS

Number of inputs	1 + JACK socket
Input voltage	1 V _{RMS}
Gain control	-3 ÷ +20 dB

OTHER PARAMETERS

Operating temperature range	-40°C ÷ +70°C
Storage temperature range	-40°C ÷ +85°C
Dimensions length/width/height	325 x 173 x 170.1 mm
Weight without cabling	6.3 kg
MTBF	80,000 hours
Mounting position	vertical

^[1] Range defined according to PN-EN 50155 based on nominal supply voltage

^[2] The value and characteristics of the overcurrent protection depend on the number and type of devices connected to a single protection device. ENTE Sp. z o.o. provides support in selecting the type of overcurrent protection for its contractors based on the electrical installation diagram.

^[3] 500 VRMS AC, 50 Hz, 1 min, according to PN-EN 50155

^[4] 500 VRMS AC, 50 Hz, 1 min, according to PN-EN 50155

^[5] Overcurrent protection: PTC fuse 3.0 A

^[6] Overcurrent protection: PTC fuse 3.0 A

^[7] Overcurrent protection: PTC fuse 3.0 A

^[8] Overcurrent protection: PTC fuse 0.5 A

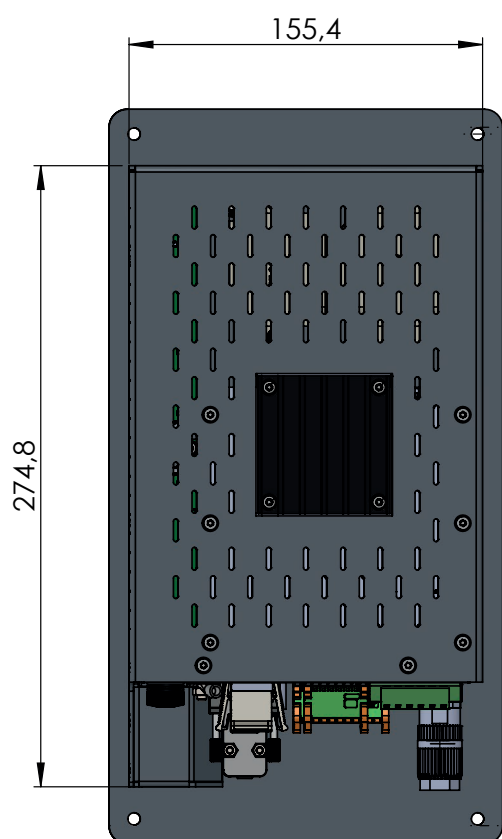
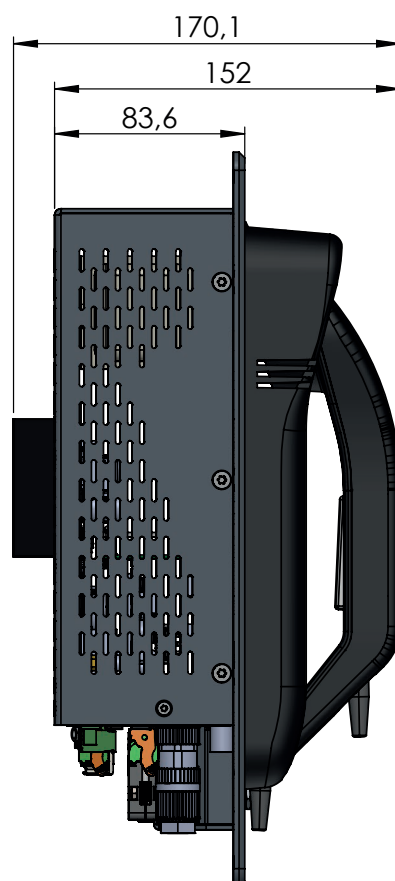
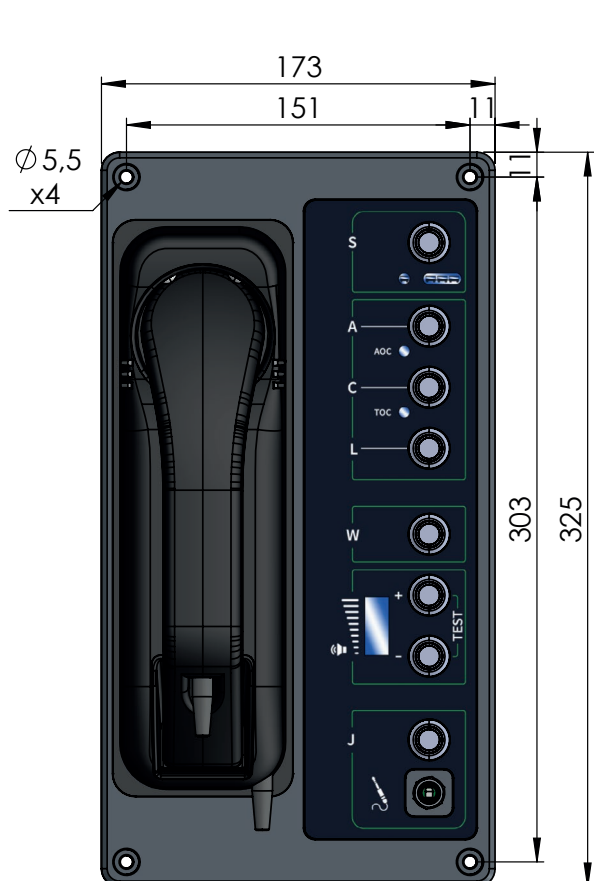
^[9] 500 VRMS AC, 50 Hz, 1 min, according to PN-EN 50155

^[10] 500 VRMS AC, 50 Hz, 1 min

^[11] 500 VRMS AC, 50 Hz, 1 min, according to PN-EN 50155

COMPLIANCE WITH STANDARDS

PN-EN 50155	Railway applications – Electronic equipment used on rolling stock
PN-EN 50121-3-2	Railway applications – Electromagnetic compatibility
PN-EN 45545-2+A1	Fire protection on railway vehicles. Part 2: Requirements for materials and components regarding fire behavior at levels HL1, HL2 and HL3
PN-EN 61373	Railway applications – Rolling stock equipment
UIC 568	Loudspeaker installations and telephone devices – Unified technical characteristics for passenger car equipment RIC





ENTE Sp. z o.o. Gaudiego Street 7, 44-100 Gliwice

Phone: +48 32 33 82 200 | ente@ente.com.pl | www.ente.com.pl

