



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

TECHNICAL SPECIFICATIONS

POWER SUPPLY

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

CAN

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

SPEAKER OUTPUTS

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

RELAY OUTPUTS

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

BISTABLE INPUTS

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

ETHERNET

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

UIC568

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

LINE INPUTS

<i>Number of inputs</i>	1 + JACK socket
<i>Input voltage</i>	1 VRMS
<i>Gain control</i>	-3 ÷ +20 dB

OTHER PARAMETERS

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

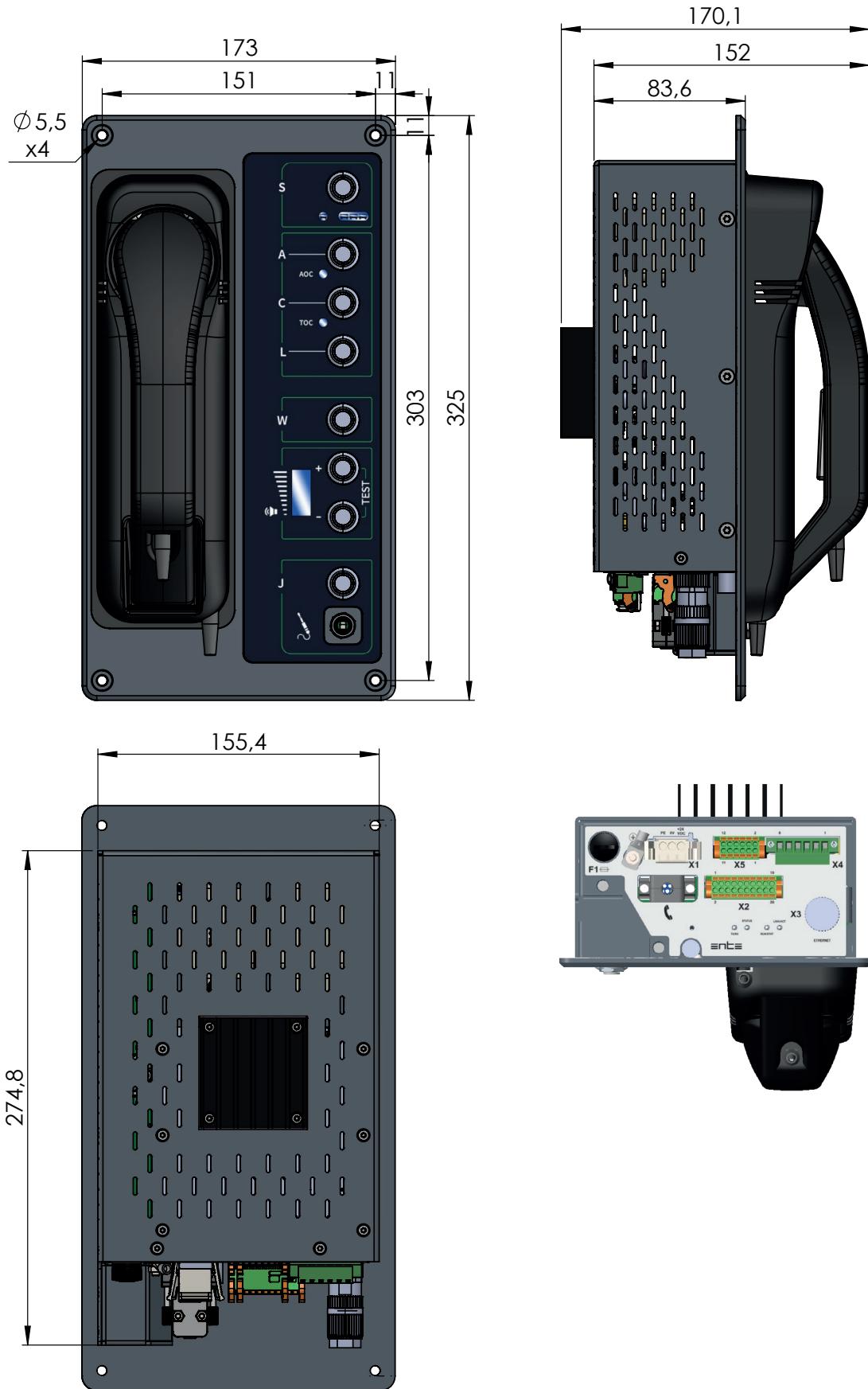
^[10] 500 VRMS AC, 50 Hz, 1 min

^[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
IIC 568	Loudspeaker installations and telephone devices – Unified technical characteristics for passenger car equipment RIC





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