AMBIENT NOISE MONITOR

Public transport vehicle's announcement system

www.ente.com.pl

DESCRIPTION OF THE DEVICE

The Ambient Noise Monitor is an advanced device designed for installation inside railway vehicles and coaches.

Working in conjunction with the public address system, the monitor plays a key role in measuring the interior noise level of the vehicle. This enables automatic adjustment of the announcement volume, significantly improving passenger comfort during the journey.

The noise level is detected by a microphone, which is an integral part of the device.

FEATURES

- ✓ Noise Level Measurement
- ✓ Volume Adjustment and Effective Volume Control
- ✓ System Integration – Noise level data transmitted via Ethernet to external devices

COMPLIANCE WITH STANDARDS:

PN-EN 50155	Railway applications - Electronic equipment used on rolling stock
EPN-EN 50121-3-2	Railway applications - Electromagnetic Compatibility
EN 45545-2	Fire protection in rail vehicles. Part 2: Requirements for materials and components in the field of combustion properties of HL1 and HL2 HL3
PN-EN 61373	Railway applications – Rolling stock equipment – Shock and vibration tests

TECHNICAL PARAMETERS

AMBIENT NOISE MONITOR

Nominal supply voltage	+24 V DC
Permissible supply voltage range	+16.8 ÷ +31.2 V DC[1]
PoE (Power over Ethernet)	Type 1, Class 1 (PoE)
Permissible PoE voltage range	+37 ÷ +57 V DC[2]
Maximum power consumption	5 W[3]
Ingress protection rating	IP 20

ETHERNET

Number of Interfaces	1
Data Transmission Rate	10/100 Mb/s
Standard	10Base-T, 100Base-T
Connector Type	M12, D-coded
Galvanic Isolation	Yes[4]

SIGNAL CHARACTERISTICS

Frequency Response	60 ÷ 12000 Hz
Gain Adjustment	0 ÷ +20 dB

CAN

Number of Interfaces	1
Data Transmission Speed	500 kb/s
Terminating Resistor	120 Ω (configurable)
Galvanic Isolation	Yes[5]

RS485

Number of Interfaces	1
Data Transmission Speed	115.2 kb/s
Terminating Resistor	120 Ω (configurable)
Galvanic Isolation	Yes[5]

OTHER PARAMETERS

Operating Temperature Range	-40°C to +70°C
Storage Temperature Range	-40°C to +85°C
Dimensions (Length / Width / Height)	163 x 103 x 39 mm
Weight (excluding cabling)	0.45 kg
MTBF (Mean Time Between Failures)	60,000 hours
Operating Position	Any position

[1)]Range determined in accordance with PN-EN 50155 based on the nominal supply voltage value

[1)]Range determined in accordance with IEEE 802.3af based on the voltage available to the end device (V)

[1)]The value and characteristics of the overcurrent protection depend on the number and type of devices connected to a single protection circuit. ENTE Sp. z o.o. provides support in selecting the appropriate type of overcurrent protection for its customers based on the electrical schematic of the installation.

[1)]500 VRMS AC, 50 Hz, 1 min, in accordance with PN-EN 50155

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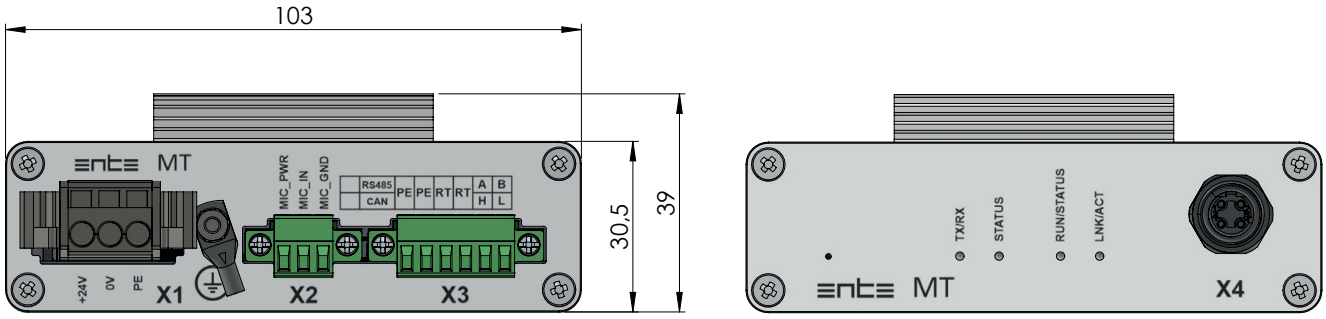

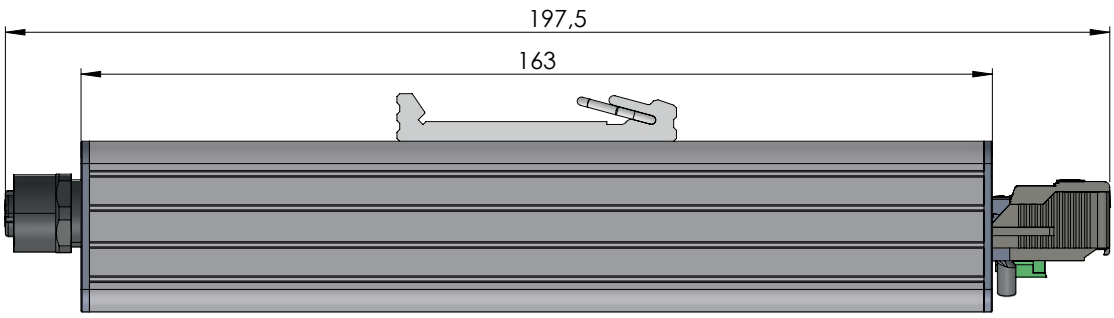

ENTE Sp. z o.o. Gaudiego Street 7, 44-100 Gliwice
Phone: +48 32 33 82 200 | ente@ente.com.pl | www.ente.com.pl