



IP Audio Amplifier

Public Transport Vehicle's Announcement System



IP Audio Amplifier



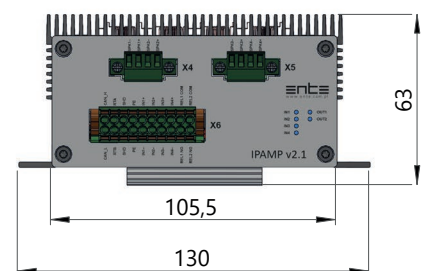
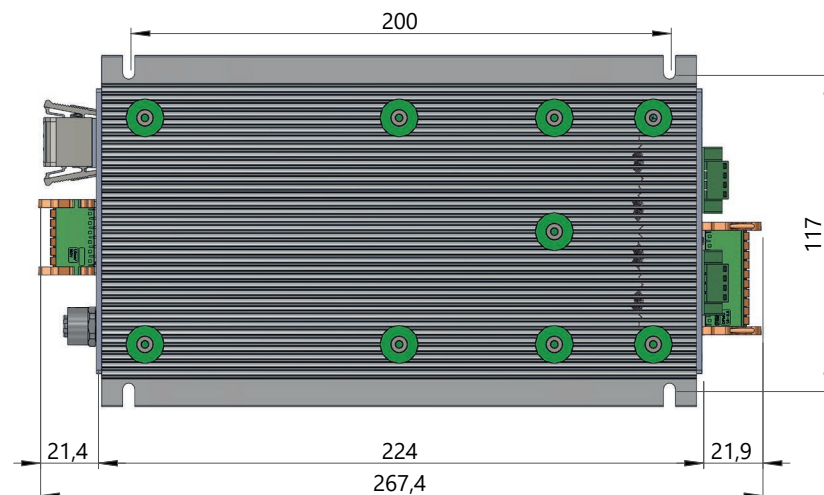
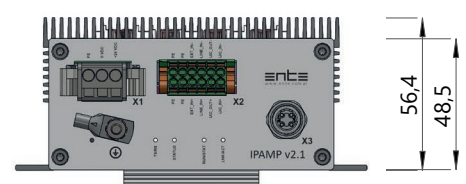
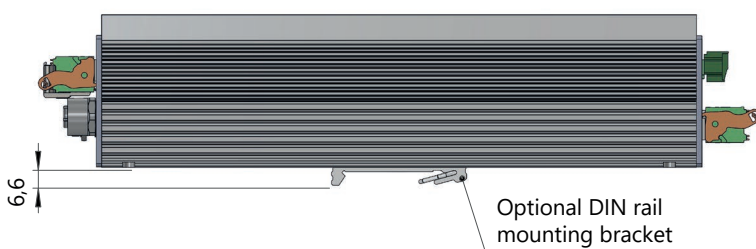
General description

The **IP Audio Amplifier** is designed to amplify analog or digital audio signals received via the Ethernet network. Intended for installation in public transport vehicles, it is mounted in areas designated for crew operations, such as the driver's cabin. This amplifier is used to play voice announcements within the vehicle



Functionality

- ✓ The primary audio path used for playing voice announcements is the Ethernet network
- ✓ Voice announcements are played in the form of analog audio signals when the Ethernet network is not operational
- ✓ The amplified audio signal is directed to a set of connected speakers



Operating temperature	-25 °C ÷ +70 °C
IP rating	IP30
Dimensions	224 (265,2 with sockets) x 130 x 63 mm
Weight	1,30 kg
Installing	35 mm DIN or 4×M4 bolts
Communication Interfaces	Ethernet 10/100base-T (M12, D-Coded), line according to UIC 568, CAN Bus

POWER SUPPLY

Nominal power voltage	24 V DC
Permissible power	
voltage range	16,8 ÷ 31,2 V DC
Max power consumption	110 W

AUDIO LINE

Number of speaker outputs	4
Output power	4 × 20 W (RMS)
Speaker Impedance	min. 8 Ω
Band	50 ÷ 20000 Hz
Number of audio linear inputs	3
Number of audio linear outputs	1
	0,5 ÷ 2,5 VRMS
Napięcie wejściowe	(Required input voltage for full saturation of the IP amplifier; capability of programmable gain control)
Impedancja wejściowa	10 kΩ
Izolacja galwaniczna	Yes ^{1) 2)}

1) 500 VRMS AC, 50 Hz, 1 min, according to EN 50155

2) isolation concerns linear I/O

DUAL STATE INPUTS

Number of inputs	4
Input current	10 mA @ 24 V
Switching voltage	7 V
Conformity with UIC 568	Yes
Galvanic isolation	Yes ¹⁾

RELAY OUTPUTS

Number of outputs	2
Output Type	NO contact
Resistance	< 1 Ω
Permissible Load	60 V / 0,2 A
Overcurrent protection	0,5 A PTC
Conformity with UIC 568	Yes
Galvanic isolation	Yes ¹⁾

ETHERNET

Number of interfaces	11
Data transmission speed	10/100 Mb/s
Standard	10base-T, 100base-T
Connector type	M12 D-Coded
Galvanic isolation	Yes ¹⁾

CAN

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



Compliance with Standards

- EN 50155** Railway applications - Electronic equipment used in rolling stock.
- EN 50121-3-2** Railway applications- Electromagnetic compatibility.
- EN 45545-2** Fire protection in rail vehicles. Part 2: materials and elements on the combustion properties at HL1, HL2 and HL3.
- EN 61373** Railway applications - Rolling stock equipment - Shock and vibration tests.
- PRM TSI 1300/2014, LOC&PAS TSI 1302/2014**

