

AUDIO PASSENGER COMMUNICATION UNIT (PCU)

ON-BOARD PASSENGER INFORMATION SYSTEM



FEATURES

- VoIP operation
- Connection for external emergency handle or similar
- Remote reset directly from cab



GETTING CONVENIENTLY IN TOUCH WITH THE TRAIN DRIVER

The Passenger Communication Unit (PCU) is the interface for bi-directional communication from the passenger to the train driver if needed. It can be easily connected to the Audio Car Controller (ACC) taking care for the transmission of the voice communication regardless whether VoIP or analog UIC568 voice is necessary.

For connecting the PCU offers 3 options:

- PoE and ETH switch saves switch connects and needs less cabling.
- Power supply combined with 2 x ETH saves switch connects based on Daisy chain
- Power supply and ETH as the 'standard' solution

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TECHNICAL DATA

Electrical properties	
Operating Voltage	Nominal Voltages: EN50155 :2017 - 110V; Other voltages available in option Optional PoE/PoE+: Support for IEEE 802.3af and IEEE 802.3at PoE/PoE+ standard
Insulation and voltage withstand	Compliant to EN50155:2017: Voltage withstand 1000VAC or 1500VDC; Insulation: >20MΩ at 500VDC
Reverse polarity protection	Yes
Voltage interruptions Class	EN50155:2017 – Class S2
Supply changeover class	EN50155:2017 – Class C1
Inrush current	Limited to 5x the nominal current
Interfaces	
User Interfaces	Faceplate composed of the following: 1 x Speaker 1 x Microphone 1 x Activation Pushbutton (Shall comply to PRM TSI) 1 x Blue LED 1 x Red LED
Status Indicator	Power; Ethernet; Status
Power In	3-pin male Phoenix Combicon
ID Input	1 x
Ethernet	1 x or 2x M12 D-coded connectors (socket) for Ethernet 10/100/1000Mbps • Optional POE+ (Only available with single Ethernet port) • Optional integrated Ethernet switch with bypass relay for daisy chain. (PoE+ option not available with this option)
Mechanical properties	
Dimensions	Special housing (under desk installation)
Housing	Custom housing as small as possible
Environment	
Operating Temperature	Class OT4 as per EN50155 :2017, equivalent to Class TX as per 50125-1 :2014 inside a vehicle compartment: -40°C to +70°C
Storage Temperature	-40°C to +85°C
Rapid Temperature Variation	EN50155:2017 Class H2
Ingress Protection	IP54
Shock and Vibration	Compliant to EN 61373 performance for Category 1 body mounted equipment. Class B. (complies to EN50155:2017)
Standards	
DIN EN 45545-2	Compliant (HL2)
DIN EN 50121-3-2	Compliant (2016)
DIN EN 50155	Compliant (2017)
NFPA130	Compliant

Disclaimer

Features and specifications are subject to change without notice. Properties relating to the Goods contained in this document do not constitute the product specifications but typical values for purposes of description only. February 2023