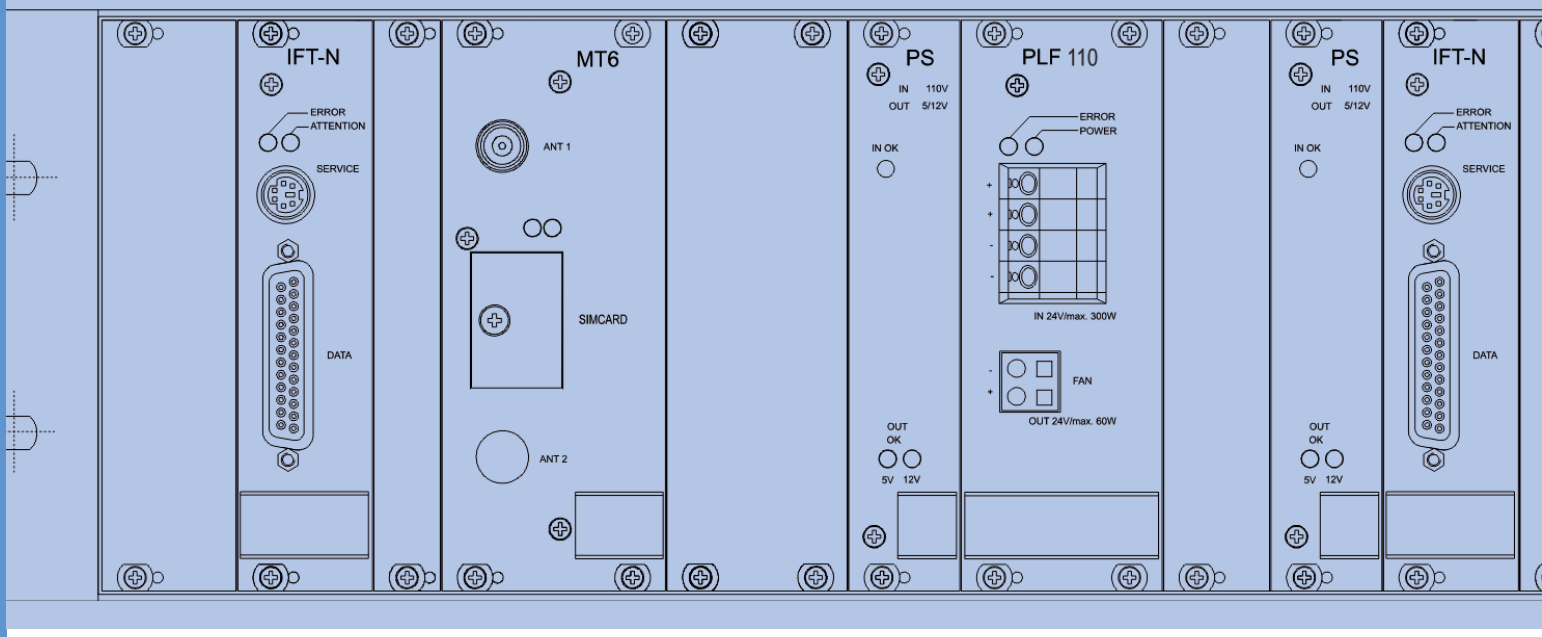


Data Radio Device

MTRS 2 RS

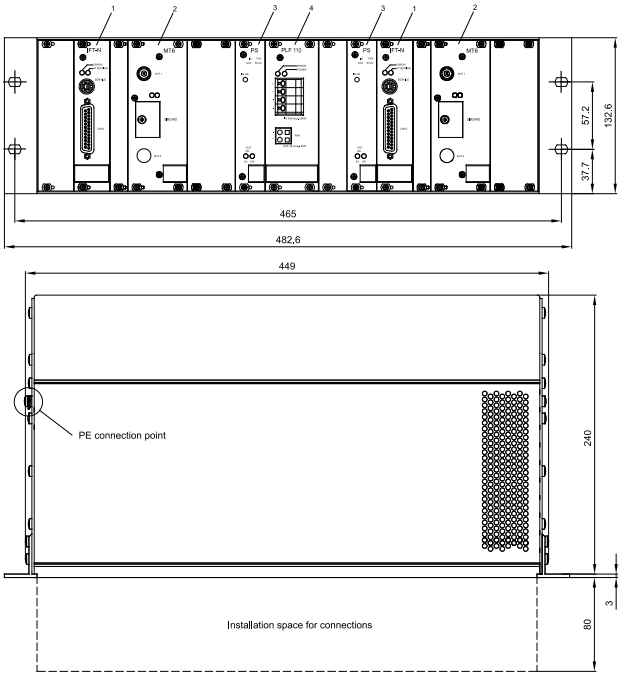
The MTRS 2 RS is a terminal unit for the purpose of digital radio data transmission applications which operates in GSM-R networks. It fulfils the European requirements for use in rail vehicles.

The MTRS 2 RS makes the transmission channels available to ETCS or general radio data transmission application. The control of the modules MT6 and entire data application is performed by the application via interfaces DATA of module IFT-N.

The terminal unit functions, in accordance with GSM 05.05 Phase 2+, over the entire 1800 MHz frequency range in the following frequencies:

- Transmitting frequency range: 1710 to 1785 MHz
- Receiving frequency range: 1805 to 1880 MHz

Dimensions:



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Technical Specification

Power Supply	
Input voltage	nominal 110 VDC
Tolerances	according to DIN EN 50155:2007
Interruption	according to DIN EN 50155, Class S1 (no interruption)
Power consumption	60 W (calculated)

Dimensions+ Weight	
Construction	Module rack (3 U / 84 HP)
Width	482.6 mm
Height	132.6 mm
Depth	243 mm
Weight	max. 6 kg

Environmental Conditions and Tests	
Protection class	IP 20 according to DIN EN 60529:2014
Vibration and shocks	in compliance with DIN EN 50155
EMC	in compliance with DIN EN 50121-3-2:2016 and EN 55022:2010
Climatic tests	in compliance with DIN EN 60068-2-1:2008-01, DIN EN 60068-2-2:2008-05, DIN EN 60068-2-14:2010-04, DIN EN 60068-2-30:2006-06
Salt Mist test	in compliance with DIN EN 60068-2-11:2000-02
Vibration tests	in compliance with DIN EN 60068-2-6:2008-10, DIN EN 60068-2-27:2010-02, DIN EN 60068-2-64:2009-04, DIN EN 61373:2011-04
Isolation test	in compliance with EN 50155:2007, § 12.2.9.2
Safety test	according to AS/NZS 60950.1:2011+ Am 1:2012
Radio spectrum test	according to EN 301511 V9.0.2 for MT6

Climatic Conditions	
Operating temperature range	-25 °C to +70 °C
Storage temperature range	-40 °C to +70 °C (in original package)
Maximal gradient	± 1 °C/min of ambient temperature
Maximal humidity	75 % in annual average
Relative humidity	95 % on max. 30 days per year
Altitude and pressure fluctuation	-100 m to 1800 m above sea level

Interfaces	
Antenna connection	2x TNC female
Radio data	2x 25-pin D-Sub
Miscellaneous	power supply, protective earth conductor

Note	
Designation scheme	**MTRS**[**2**: 2x MT6] [**design**] / [**nominal input voltage**]

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