



triorail

GSM-R technology for railways

EDOR module TRE-6RM



Transceiver made for ETCS / EDOR applications

TRE-6RM

The module for rack-mounted solutions provides excellent capabilities for ETCS and EDOR applications, by combining the TRC-6RM and a wide range power supply unit. This device utilizes enhanced transmitting and receiving filters which allows a closer antenna placement (<1m can be possible for 2 TRE-6RM devices).



Technical data

Dimensions

L: 185 mm (w/o front panel and connectors)
W: 70.78 mm (fits 14HP)
H: 128.40 mm (fits 3U)

Weight

1470g

Supply voltage

14.4 V_{DC} to 154 V_{DC} galvanically isolated
Phoenix PSC 1.5 / 5-M connector

Power Consumption (@70°C *)

Idle 5 W
CSD data 12 W
GPRS (2TX/3RX) 18 W
E-GPRS (2TX/3RX) 13 W

* @temperatures below 60°C power consumption is about 3.5 Watts lower

Temperature range

-40°C to +70°C (Class OT4 – ST1)

Interfaces

Status indicators 7-LEDs
Card reader Mini-SIM (1.8/3.0V)
Antenna connector A TNC 50 Ω (RX/TX)
Antenna connector B TNC 50 Ω (RX)
User Interface RS422 or RS232 (D-sub HD 26 pin female) PPP stack
Service Interface RS232 or mini-USB GPRS/E-GPRS data transfer
(RS232 @same connector as the User interface)

Applications

The EDOR device TRE-6RM is designed for ETCS applications and fits in 10", 19" or other industrial sizes.

System features

Frequency bands

GSM-R / EGSM-R / EGSM900 / GSM1800

RF output power

Class 2/8W	CSD/GPRS	900MHz bands
Class E1/2W	E-GPRS	900MHz bands
Class 1/1W	CSD/GPRS	1800MHz bands
Class E2/0.4W	E-GPRS	1800MHz bands

Professional Mobile Standard

ETSI TS 102 933 V 2.1.1

ER-GSM Frequencies

ETSI TS 102 932 V 1.1.1

EIRENE

FRS 8.1.0 / SRS 16.1.0 (Data only)

3GPP Release 4

Mobile station class B

Control by AT commands via User interface

Data services

E-GPRS class 10

Modulation coding scheme MCS 1 – MCS 9

GPRS class 10

Coding scheme CS 1 – CS 4

CSD (transparent and non transparent mode)

PPP stack

GPRS/E-GPRS data transfer

Authentication

PAP, CHAP

Sample Application with 6 TRE-6RM devices in a 19" Rack

