



triorail

GSM-R technology for railways

GSM-R data only module

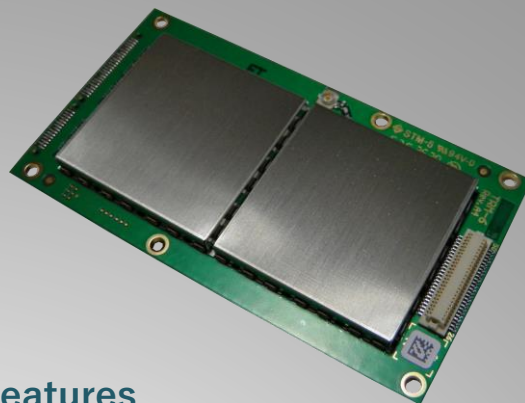
TRM-6



GSM-R data transmission
E-GPRS GPRS CSD

TRM-6

The data only module with EDGE, GPRS and CSD capabilities provides excellent receiver characteristics.



Technical data

Dimensions

L: 65 mm
W: 35 mm
H: 6.9 mm

Weight

14 g

Supply voltage

3.6 V_{DC} to 4.5 V_{DC}

Current consumption

| | |
|------------------|--------|
| Power down | 2 mA |
| Idle mode | 16 mA |
| CSD data | 360 mA |
| GPRS (2TX/3RX) | 630 mA |
| E-GPRS (2TX/3RX) | 370 mA |
| Rush-in | 8 A |

Temperature range

-25° to +70° C

Interfaces

50-pin board-to-board connector:

2 serial interfaces
Power supply
Card reader Mini-SIM (1.8 /3.0 V)

Antenna connector Type U.FL 50 Ω

Applications

The module TRM-6 is suitable for data only transmission and can be applied to embedded solutions within GSM-R and EGSM-R environment.

Part no.

TRM-6 1502

System features

Frequency bands

GSM-R / EGSM-R / EGSM900 / GSM1800

RF output power

| | | |
|---------------|----------|------------------|
| Class 4/2W | CSD/GPRS | (E)GSM-R/EGSM900 |
| Class E2/0.5W | E-GPRS | (E)GSM-R/EGSM900 |
| Class 1/1W | CSD/GPRS | GSM1800 |
| Class E2/0.4W | E-GPRS | GSM1800 |

Professional Mobile Standard

ETSI TS 102 933 V 2.1.1

ER-GSM Frequencies

ETSI TS 102 392 V 1.1.1

EIRENE

FRS 8.0.0 / SRS 16.0.0 (Data transmission only)

GSM Phase 2 and 2+

Mobile station class B

Control by AT commands via serial interface

Data services

E-GPRS class 10, modulation coding scheme MCS 1 – 9

GPRS class 10, coding scheme CS 1 – 4

CSD (transparent and non transparent mode)

Fax group 3, class 2

PPP stack for GPRS/E-GPRS data transfer

Authentication: PAP, CHAP

SMS via GSM, GSM-R and GPRS/E-GPRS
(MO, MT, CB, text and PDU mode)