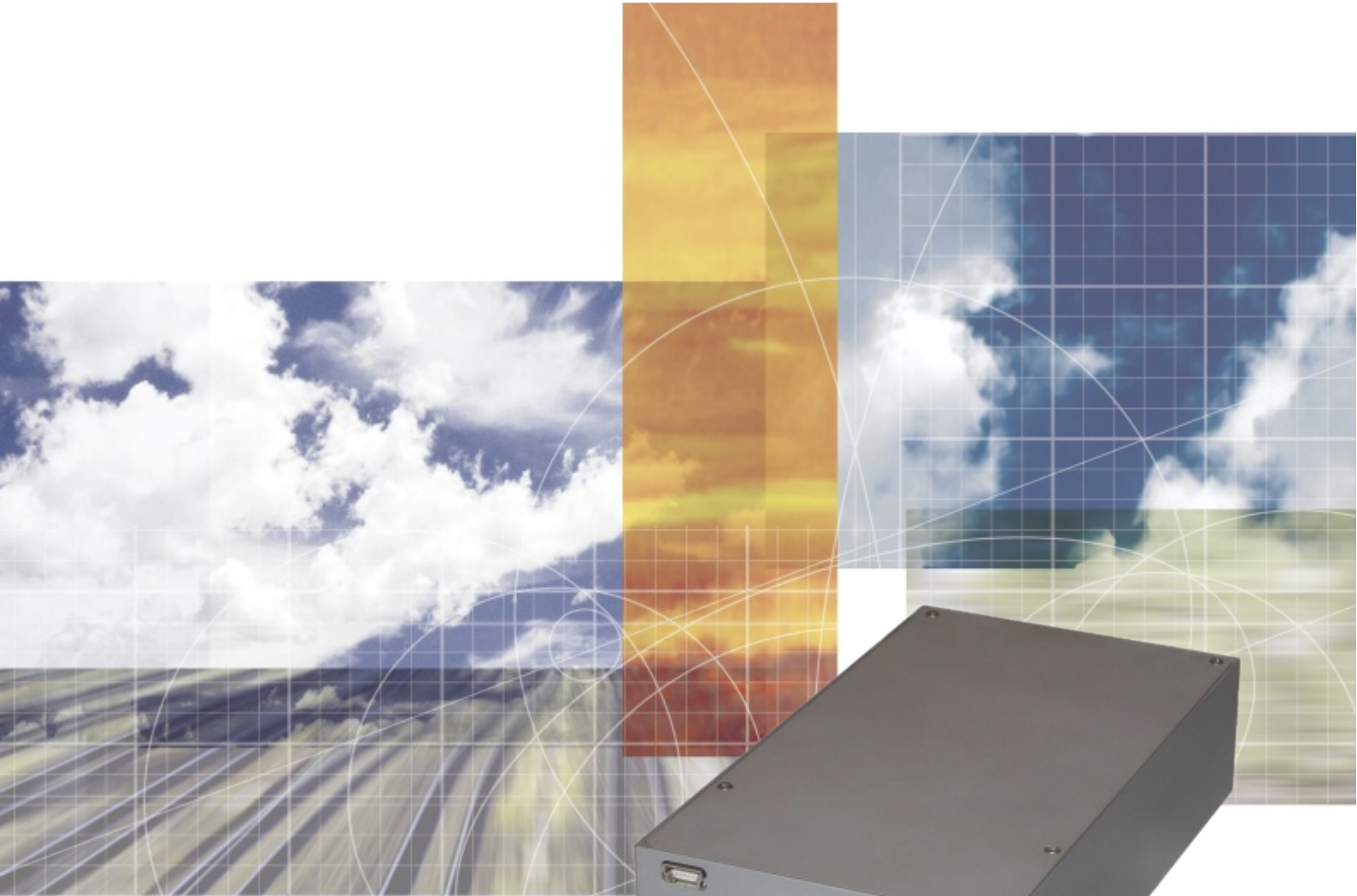




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TRC-3



Approved Technology for the
GSM-Rail System

Datasheet

TRC-3

The TRC-3 is a high performance terminal for GSM-R networks. Due to long standing product experience and innovative technologies this professional device is a modem for all sorts of CAB Radio and ETCS applications.

Technical Data

- Dimensions 125 x 70 x 30 mm (L x W x H)
(without antenna connector)
- Weight 500 g
- Power consumption 800mA max. (without Peltier element)
3.5 A (peak)
- Supply voltage 14 - 50 volt DC
- Temperature range -25°C to +85°C



System / Standards

- Quad-band GSM-R / EGSM 900 / GSM 1800 / GSM 1900
- GSM Phase 2 / Phase 2+
- GPRS multi-slot class 8 (8 watt), class 10 (2 watt)
- Mobile station class B
- Output power
 - 900 MHz 8 watt
 - 1800 MHz 1 watt
 - 1900 MHz 1 watt
- Control with AT commands via RS232 or USB interface (virtual COM-Port)

Specifications for Voice

- Triple-rate codec for HR, FR, EFR
- Adaptive multi-rate (AMR)
for non ASCII applications supported
- Hands-free operation (with optional accessories)
- Noise reduction and echo cancellation

Data Services

- GPRS class 8 (8 watt), class 10 (2 watt)
- PBCCH (Packet Broadcast Control Channel) support
- Coding scheme CS 1-4
- CSD data transmission
 - Up to 14.4 kbps
 - Non transparent mode
 - Transparent mode
- PPP stack for GPRS data transfer
- Fax group 3, class 2
- TCP/IP stack access via AT command protocols:
TCP, UDP, HTTP, FTP, SMTP, POP3

Interfaces

- RS 232 interface (SUB D 9 pol.)
- USB interface (USB Mini B connector)
 - 2x serial via USB
 - Digital audio via USB
- AT commands via RS232 or USB interface
- Voltage supply via RIA PLUGCON Typ 382
- Antenna connector (SMA) 50 ohm
- RJ50 (10 pin) female connector for analog audio
- 3 status LEDs
- Miniature SIM card holder

ASCII Features

- VGCS (Voice Group Call Service)
- VBS (Voice Broadcast Service)
- UUS1 (User-to-User Signalling type 1)
- eMLPP (Enhanced Multi-Level Precedence and Preemption)

EIRENE Features

- FN supported (Functional Number)
- PFN supported (Presentation Functional Number)
- REC supported (Railway Emergency Call)

Target Applications

The TRC-3 can be used for portable, as well as built-in CAB Radio systems or for ETCS (European Train Control Systems)