

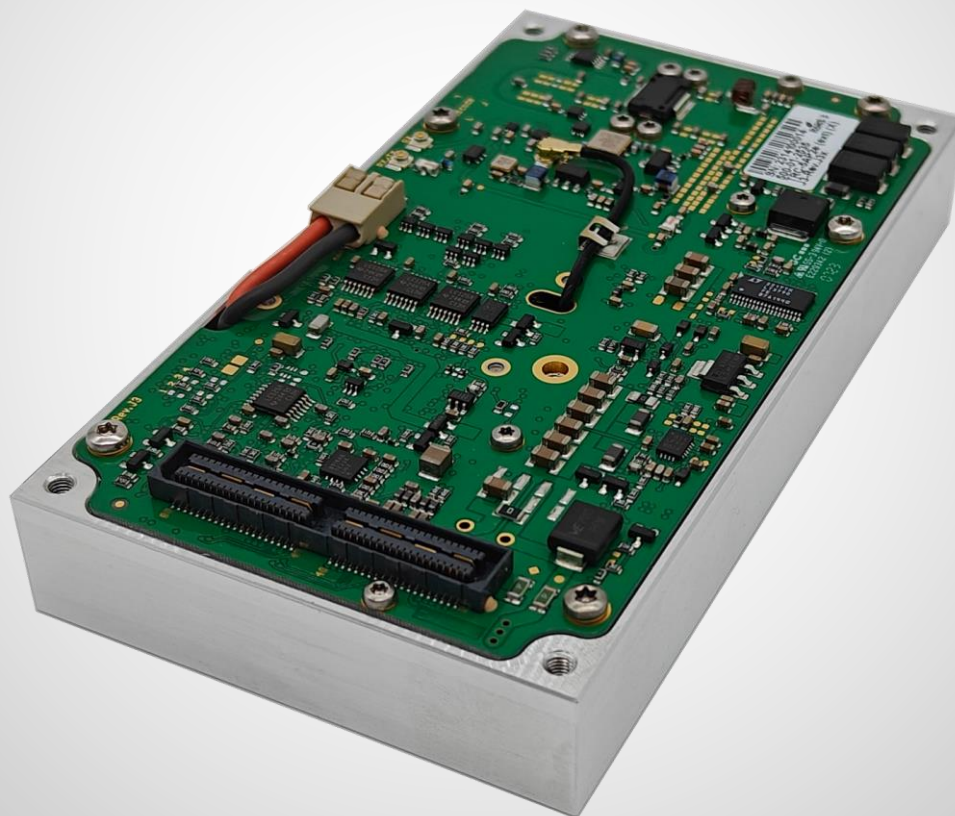


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GSM-R technology for railways

GSM-R module

TRC-5AP2e ext J3



GSM-R radio module for robust
voice and data communication

TRC-5AP2e ext J3

The module for tailored embedded solutions provides excellent receiver characteristics.



Technical data

Dimensions (LxWxH)	125 x 70 x 25 mm
Weight	286 g
Supply voltage	11 - 32 V _{DC}
Current consumption (12V _{DC} /70°C)	
OFF mode	40 mA
Idle	250 mA
Voice and CSD data	745 mA
GPRS (2TX/3RX)	1180 mA
Inrush	8 A
Temperature range	-40°C to +85°C

Interfaces

80-pin board-to-board connector:

- Power supply
- 2 serial interfaces
- USB
- 2 audio interfaces

Card reader Mini-SIM (1.8/3.0V)

Antenna connector A U.FL 50 Ω (RX/TX)

Antenna connector B U.FL 50 Ω (RX)

ASCI

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

EIRENE

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

Part no.

TRC-5AP2e ext J3 1386

System features

Frequency bands
GSM-R / EGSM-R / EGSM900 / GSM1800

RF output power
Class 2/8W 900MHz bands
Class 1/1W 1800MHz bands

Professional Mobile Standard
ETSI TS 102 933 V 2.1.1

ER-GSM Frequencies
ETSI TS 102 932 V 1.1.1

GSM Phase 2 and 2+

Mobile station class B

Audio

Voice triple-rate codec for HR, FR, EFR and AMR for non ASCII applications

Module control by AT commands

Data services

GPRS class 10
Coding scheme CS 1 – CS 4

PBCCH supported

CSD (transparent and non transparent mode)

Fax Group 3, class 1/2

PPP stack for GPRS data transfer

Authentication: PAP, CHAP

Protocols: TCP, UDP, HTTP, FTP, SMTP, POP3

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

Applications

The module TRC-5AP2e ext J3 is designed for CAB-Radio and data applications and fits into many embedded railway solutions.