



# GSM-R module 8W

**TRC-5RM**  
**TRC-5RM ext**



**GSM-R new defined to cope with  
challenging radio interferer**

**Optional: Extended GSM-R**

**GSM-R technology for railways**

# TRC-5RM / TRC-5RM ext



The modules for rack-mounted solutions provide a slim design and excellent receiver characteristics.

## Technical data

Dimensions	128.5 mm	[Height, fits 3U]
	170.5 mm	[Depth]
	25.0 mm	[Width, fits 5HP]
Weight	500 g	
Supply voltage	12 Vdc	
Current consumption	@20°C	@70°C
Idle mode	74 mA	315 mA
Speech mode	380 mA	630 mA
GPRS (cl. 10)	660 mA	930 mA
Standby current	62 mA	
In-rush current	@70°C	4 A
Temperature range	-40°C to +85°C	

## Interfaces

96-pin DIN 41612 backplane connector	
USB Mini B connector	[service and maintenance only]
Antenna connector A	TNC 50Ω [RX/TX]
Antenna connector B	TNC 50Ω [RX]
Display	6 status LED
Card reader	Mini-SIM

## ASCII features

VGCS	[Voice Group Call Service]
VBS	[Voice Broadcast Service]
UUS1	[User-to-User Signaling 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]

## Applications

The modules TRC-5RM and TRM-5RM ext are designed for CAB-Radio and Data-Only-Radio applications and fit into 10", 19" or other industrial sizes.

## System / Standards

Frequency bands	GSM-R/EGSM900/GSM1800	[TRC-5RM]
	EGSM-R/EGSM900/GSM1800	[TRC-5RM ext]
RF output power	Class 2 [8 W] for GSM-R/EGSM-R/EGSM900	
	Class 1 [1 W] for GSM1800	
Professional Mobile Standard	ETSI TS 102 933 V 1.2.1	
ER-GSM Frequencies	ETSI TS 102 932 V 1.1.1	[TRM-5RM ext only]
GSM Phase 2 and 2+		
Mobile station class B		
Audio	Voice triple-rate codec for HR, FR and EFR	
	AMR for non ASCII applications supported	

AT commands via serial or USB interface

## Data services

GPRS class 10
PBCCH supported
Coding scheme CS 1-4
CSD data transmission with up to 14.4 kbps
[Transparent and non transparent mode]
Fax group 3, class 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]

## Part no.

TRC-5RM	1351
TRC-5RM ext	1353