



GSM-R EDGE modem



TRM-3T_{edge}

**8-PSK modulation
for enhanced data throughput**

GSM-R technology for railways

TRM-3T_{edge}

The modem features a higher data rate if the GSM-R network provides EDGE with sufficient RF performance.



Technical data

Dimensions	165 x 86 x 37 mm [LxWxH]
Weight	300 g
Supply voltage	8 – 30 Vdc
Current consumption	
Idle mode	35 mA
Speech mode	165 mA [average]
GPRS (cl. 10)	260 mA [average]
EDGE (cl. 10)	180 mA [average]
Peak	4 A
Temperature range	-20°C to +55°C

Interfaces

RS232 serial interface	9-pin D-Sub
Power supply	6-pin Western plug
Hand-set	4-pin Western plug
Antenna connector	Type FME 50Ω male
Display	Status LEDs
Card reader	Mini-SIM

Applications

The modem TRM-3T_{edge} can be applied easily and ad hoc for GSM-R data and voice solutions within PC, notebook or other computing environment.

Part no.

TRM-3T_{edge} 1123

System / Standards

Frequency bands	GSM-R/EGSM900/GSM1800/GSM1900
RF output power	Class 4 [2 W] for GSM-R/EGSM900 Class 1 [1 W] for GSM1800/GSM1900 Class E2 [0.5 W] EDGE via GSM-R/EGSM900 Class E2 [0.4 W] EDGE via GSM1800/GSM1900
GSM Phase 2 and 2+	
Mobile station class B	
Audio	Voice triple-rate codec for HR, FR and EFR AMR
AT commands via serial interface	
Data services	EDGE class 10 with up to 236 kbps [DL] and 118 kbps [UL] Coding scheme MCS-1 to MCS-9 GPRS class 10 with up to 85 kbps [DL] and 42 kbps [UL] Coding scheme CS 1-4 PBCCH supported CSD data transmission with up to 14.4 kbps [Transparent and non transparent mode] Fax group 3, class 2 PPP stack Protocols: PAP and CHAP SMS via GSM, GSM-R, GPRS and EDGE [MO, MT, CB, text and PDU mode]