

TRS 3900

Train Radio System



TRANSPORTATION SOLUTIONS

Modern, reliable and intelligent radio solution platform for rolling stock applications built on proven and popular TETRA & LTE Standard.



FEATURES



Integrated Design

Integrated, compact design suitable for rolling stock applications



Multi-bearer Support

Supports global OPEN standards [TETRA & LTE standards]



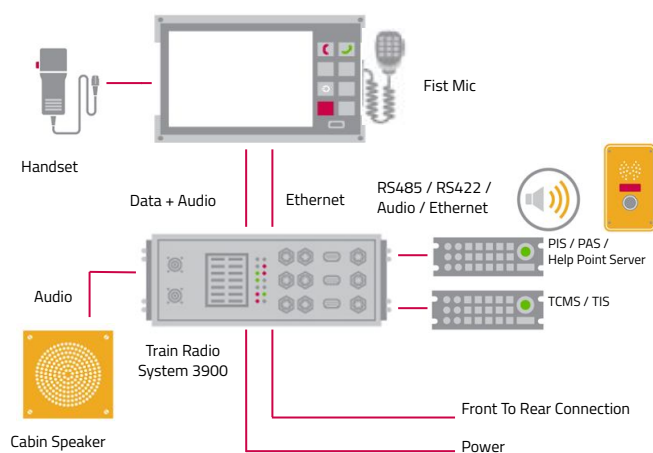
Configurable Interfaces

Configurable interfaces for integration to onboard systems



Future Upgradability

Upgrade to full IP /FRMCS architecture for future applications



Train Radio System TRS 3900 is a versatile, reliable and state-of-art onboard radio solution that is typically installed in each front and rear cabin. It provides radio communication based on global OPEN standards such as TETRA or LTE.

TRS 3900 provides integration for various Rolling Stock systems such as TCMS/TIMS/TIS, PIS/PAS/PA/HP and CCTV using interfaces such as RS232, RS485, RS422, Digital I/O, Audio Lines and Ethernet. The integration facilitates transmission of Passenger Announcements, Help Point Calls, Signalling Data, CCTV video and alarms from onboard systems. TRS 3900 can be deployed in Front-Rear configuration for additional redundancy. 14 Status LEDs provide easy fault monitoring and diagnostics.

TECHNICAL SPECIFICATIONS

Onboard Interfaces	GbE Ethernet Port RS232 / RS 422/ RS 485 Balanced Audio Input/Output Speaker Audio 8 Ohms 10 W	Redundancy	Front to Rear Connection DC-DC Power Converter Fist Microphone Connection [Direct Audio]
Bearer	TETRA / LTE	Antenna Connection	TETRA : RF - N[F], GPS - TNC[F] LTE : MAIN - N[F], AUX - TNC [F]
RF	TETRA [10W] LTE [150mW]	Compliances	TETRA : ETSI EN 300-392 LTE : 3GPP Release 12+QCI
Electrical Specification	43-160 VDC Input ,+ 0.5% [Redundant optional] EN50155	Accessories	Handset, Fist Microphone (standby)
Mechanical Specifications	Dimensions : 3U [H] x 84HP [W] x235mm [D] Front Clearance : 200 mm Recommended Weight : > 3000 g [typical]	Environmental Specifications	Temperature- -40°C to +85°C Operating - -30°C to + 70°C Humidity -20% to 90% IP rating – IP20
Integration to Onboard Systems	Train Control & Management System [TCMS] Train Information System [TIS / TIMS] Passenger Announcement [PA] Passenger Information System [PIS] Passenger Emergency Activation [PEA] Help Point [HP] CCTV Video	Data from Onboard Systems	Alarms from rolling stock equipments Alarms from rolling stock link failures PEA / Help Point Activation Active Cabin
		Fault Management	14 LED indicators Remote display of Alarms on TRCP
Interface to Onboard Signalling	Automatic Train Protection [ATP] European Vital Computer [EVC] ETCS 2	Location	Track Circuit, GPS/GLONASS [Optional]