GSM-R Cab Radio MESA 26

CR26

The CR26 is a terminal unit for the purpose of single mode train radio and in connection with an analogue radio module ARM 26 a dual mode train radio, shunting radio and data applications which operates in GSM-R network.

It fulfils the European requirements for use in rail vehicles.

The CR26 is the main component of a digital train radio systems. It consists of the digital transmission and receiving device, the controls, the interface modules for the external devices and the internal power supply. The CON26 module controls the radio link, regulates the priority of the calls, controls the operating devices, the additional data applications and the interface modules. Software, configuration and diagnostic data can be read and/or updated of the CR26 via the LAN interface and over the air interface (if supported by network).

The terminal unit operates in accordance with GSM 05.05 Phase 2+ and in the extended GSM / GSM-R -frequency range in the following frequencies:

- Transmitting frequency range: 873 to 915 MHz
- Receiving frequency range: 918 to 960 MHz.

Highlights:

- universal system architecture
- uniform and standardised interfaces and sub-assemblies
- 19” plug-in printed circuit board
- cost optimised spares inventory
- fast and efficient repair
- minimized training needed by the maintenance personnel

Components:

In joint operation with operating device MMIC, handsets and loudspeakers, the CR26 realises EIRENE functionality.

This standard model can be customised with the following options:

- up to 2 **IFS26** module with 2 serial interfaces for data transmission and audio
- **UIC26** module for connecting to the train’s internal line according UIC 568 (PA / Intercom)
- **SW26** module ethernet switch with 3 connectors
- **DIO26** module with 4 digitale In- and Output
- **PAI26** module for connecting announcement system
- **SWI26** inteligent switch with local controller
- **IFPN26** Profinet interface
- **LTE26** LTE network interface
- **IFMVB** MVB interface

Technical Specification

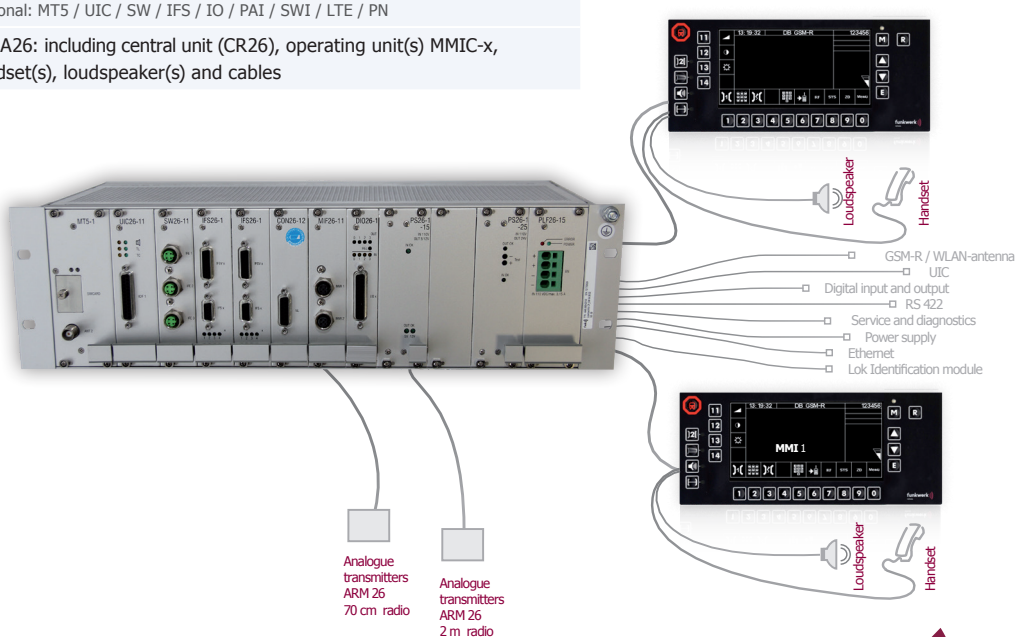
Power Supply		Dimensions + Weight	
Input voltage	24 / 36 / 48 / 72 / 110 V_{DC}	Construction	Module rack (3U/84HP)
Tolerances	according to DIN EN 50155	Width	482,6 mm
Interruption	according to DIN EN 50155, classe S1 (no interruption)	Height	132,6 mm
Maximal input power	nominal 210 W (calculated)	Depth	190,5 mm
Maximal power consumption	16 A (on voltage 24 V)	Weight	max 7 kg

Environmental Conditions	
Protection class	IP 20 according to DIN EN 60529
Vibration and shocks	according to DIN EN 50155
EMC	according to DIN EN 50121-3-2 and DIN EN 50155

Climatic Conditions	
Operating temperature range	-25 °C to +70 °C (EN 50155 T3)
Storage temperature range	-40 °C to +70 °C (in original package)
Maximal gradient	± 1 °C/min of ambient temperature
Maximal humidity	75 % in annual average
Relative humidity	95 % on max. 30 days per year
Altitude and pressure fluctuation	-100 m to 1800 m above sea level

Interfaces			
Operating devices MMIC	2 x circular connector M12	IFMVB	3pin; 5pin D-Sub
Antenna connection	TNC-female GSM-R; TNC-female WLAN or GPS (Option)	IFMVB	
UIC line	25-pin D-Sub-female (Option)	SWI26	circular connector M12
Digital input and output	25-pin D-Sub-female (Option)	IFPN	2x circular connector M12
RS422	1x 26-pin HD-D-Sub-female ; 1x 15-pin HD-D-Sub-female (Option)	LTE26	2x TNC female
Service, diagnostics	circular connector M12		1x circular connector M12
Extension interface IFE	circular connector M12		
Lok identification module NL	15-pin D-Sub-female		
Miscellaneous	power supply, protective earth connector		

Note	
Designation scheme	CR26 (input voltage) optional: MT5 / UIC / SW / IFS / IO / PAI / SWI / LTE / PN
System identification	MESA26: including central unit (CR26), operating unit(s) MMIC-x, handset(s), loudspeaker(s) and cables



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