



GSM-R Cab Radio MESA 26 protected

CR26P

The CR26P is a terminal unit for the purpose of single- and dual mode train radio, shunting radio and data applications which operates in GSM-R networks. It fulfils the European requirements for use in rail vehicles.

The CR26P 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 CR26P 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:

- fulfils the IP54 protection class
- universal system architecture
- uniform and standardised interfaces and sub-assemblies
- cost optimised spares inventory
- fast and efficient repair
- minimized training needed by the maintenance personnel

Components:

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

This standard model can be equipped with the following assemblies:

- up to 2 **IFS** module with 2 serial interfaces for data transmission
- **UIC26** module for connecting to the train's internal line according UIC 568 (PA / Intercom)
- **SW26** module ethernet switch with 3 connectors
- module **IFE26-1** Ethernet
- **DIO26** module with 4 digitale In- and Output

Malux
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Technical Specification

Power Supply		Dimensions+ Weight	
Input voltage	24 V _{DC} / 48 V _{DC}	Construction	enclosed housing (IP 54)
Tolerances	according to DIN EN 50155	Width	410 mm
Interruption	according to DIN EN 50155, classe S1 (no interruption)	Height	132 mm
Maximal input power	nominal 200 W (calculated)	Depth	200 mm
Maximal power consumption	8 A (on voltage 24 V)	Weight	max 14 kg
Environmental Conditions			
Protection class	IP 54 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		
Antenna connection	TNC-female GSM-R; TNC-female WLAN or GPS (Option)		
UIC line	25-pin D-Sub (Option)		
Digital input and output	25-pin D-Sub (Option)		
RS422	1x 25-pin HD-D-Sub ; 1x 15-pin HD-D-Sub (Option)		
Service, diagnostics	circular connector M12		
Extension interface IFE	circular connector M12		
Lok identification module NL	15-pin D-Sub		
Miscellaneous	power supply, protective earth connector		
Note			
Designation scheme	CR26 (input voltage) optional: GPS / MT5 /UIC / SW / IFS / IO		
System identification	MESA26: including central unit (CR26P), operating unit(s) MMIC-x, handset(s), loudspeaker(s) and cables		

