

GSM-R Cab Radio MESA 26

CR26P



The CR26P central unit is a train radio for GSM-R radio networks and ensures operational communication for the train driver. The CR26P can be expanded with an ARM26P/x analog radio to form a dual-mode train radio for voice radio/shunting radio and data radio applications. The CR26P complies with protection class IP54.

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.

COMPONENTS

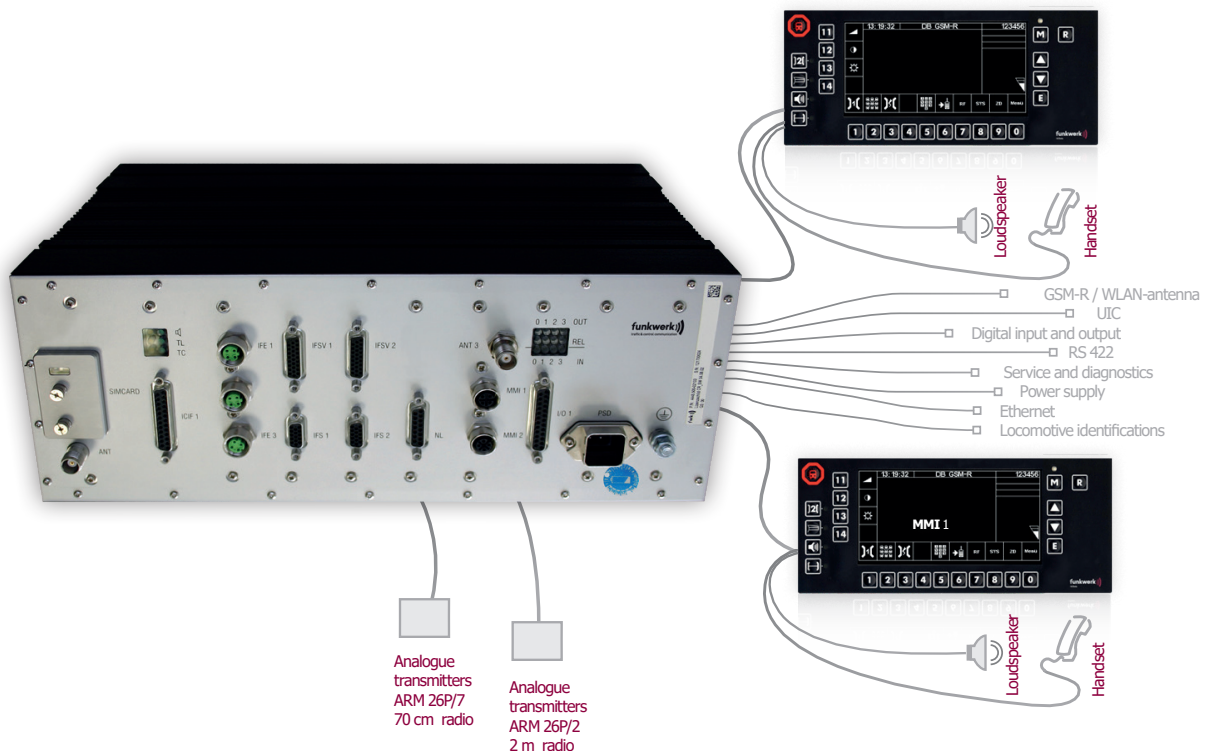
The CR26P realises EIRENE functionality in joint operation with operating device MMIC/MMIT, handset and cabin loudspeaker.

This standard model is equipped with the following assemblies:

- » two **IFS26** modules 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
- » **DI026** module with 4 digital In- and Output

HIGHLIGHTS

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



TECHNICAL DATA

DIMENSIONS / WEIGHT

| | |
|--------------|-------------------------|
| Construction | enclosed housing (IP54) |
| Width | 345 mm |
| Height | 132 mm |
| Depth | 195 mm |
| Weight | max 8 kg |

POWER SUPPLY

| | |
|---------------------------|--|
| Input voltage | 24, 36, 48, 72, 110 VDC by means of external DC:DC converter |
| Tolerances | according to DIN EN 50155 |
| Interruption | according to DIN EN 50155, classe S1 (no interruption) |
| Maximal input power | nominal 240 W (calculated) |
| Maximal power consumption | 16 A (on voltage 48 V) |

ENVIRONMENTAL CONDITIONS

| | |
|----------------------|--|
| Protection class | IP54 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 |

NOTE

| | |
|-----------------------|---|
| Designation scheme | CR26P (input voltage) |
| System identification | MESA26: including central unit (CR26P), operating unit(s) MMIC-x, MMIT, handset(s), loudspeaker(s) and cables |

TECHNICAL DATA

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-female |
| Digital input and output | 25-pin D-Sub-female |
| RS422 | 2 x 26-pin HD-D-Sub-female ; 2 x 15-pin HD-D-Sub-female |
| Service, diagnostics | circular connector M12-female |
| Extension interface IFE | circular connector M12-female |
| Lok identification module NL | 15-pin D-Sub-female |
| Miscellaneous | power supply, protective earth connector |
