GSM-R CAB RADIO MESA®26 - CR26S

HIGHLIGHTS AND TECHNICAL INFORMATION

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The Cabradio **CR26S** is a terminal unit for the purpose of train radio, shunting radio and data applications which operates in GSM-R networks and in the analogue radio networks. It fulfils the European requirements for use in rail vehicles. The device has a modular design and can therefore be configured according to the respective customer requirements.

The Cabradio **CR26S** includes the digital radio module **MT5E**, the control **CON26S** and the power supply. Optionally, the unit can be equipped with the analogue transmitter and receiver **RMA26S** and the interface modules **(UIC26S, SDIO26S, SPIO26S)**. The module **CON26S** controls the GSM-R module, manages the priority of the calls, controls the operating devices, the modules for analogue train radiotelephony, the additional data applications and the interface modules. The digitale radio module **MT5E** enables the transmission of data and voice and operates in accordance with GSM 05.05 Phase 2+ in the extended GSM / GSM-R -frequency range in the following frequencies: Transmitting frequency range: 873 to 915 MHz and Receiving frequency range: 918 to 960 MHz.

The analog radio module **RMA26S** enables the transmission of voice and data telegrams in the following analog radio systems: RMA26S-2: 2-m-Band, RMA26S-7: 70-cm-Band, RMA26S-7B, RMA26S-72, RMA26S-7B2: 2-m- and 70-cm-Band.

HIGHLIGHTS

- 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
- Single-Mode / Dual-Mode

TECHNICAL DATA

DIMENSIONS & WEIGHT

CONSTRUCTION	rack
HEIGHT	3 HE
WIDTH	84 TE
DEPTH	190.5 mm
WEIGHT	8 kg

POWER SUPPLY

INPUT VOLTAGE	24 to 110 VDC
TOLERANCES	according to DIN EN 50155
INTERRUPTION	according to DIN EN 50155, class S1 (no interruption)
MAXIMAL POWER CONSUMPTION	nominal 230 W (calculated)
TYPICAL POWER CONSUMPTION	25 W (idle mode) 50 W (call in digital radio mode and with public address) 75 W (transmission in analogue radio mode 2 m with 10 W) 80 W (Transmission in analogue radio mode 70 cm with 6 W)

ENVIRONMENTAL CONDITIONS

PROTECTION CLASS	IP20 according to DIN EN 60529
VIBRATION AND SHOCK	according to DIN EN 50155
EMC	according to DIN EN 50121-3-2 and DIN EN 50155

CLIMATIC CONDITIONS

OPERATING TEMPERATURE RANGE	OT3: -25 °C to +70 °C (EN 50155)
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 / SYSTEM CONNECTIONS

GSM-R ANTENNA CONNECTION	MT5E	TNC female
CONNECTING THE CONTROL UNIT	CON26S	2 x 5-pin M12 female (coding A)
CONNECTING THE GPS ANTENNA		SMA female
SERVICE INTERFACE		4-pin M12 female (coding D)
CONNECTION TO THE ON-BOARD POWER SUPPLY	PLFE26-1-20	3-pin female (Harting PushPull Power)
PROTECTIVE EARTH CONNECTOR		

INTERFACES / OPTIONAL CONNECTIONS

TRAIN TRANSIT LINE	UIC26S	25-pin D-Sub female
SERIAL DATA EXCHANGE RS232	SDIO26S	9-pin D-Sub female
SERIAL DATA EXCHANGE RS422 / RS485		5-pin M9 female
DIGITAL INPUTS AND OUTPUTS		15-pin HD-D-Sub female
SERIAL DATA EXCHANGE RS422	SPIO26S	5-pin M9 female
DIGITAL INPUTS AND OUTPUTS		15-pin D-Sub female
ANALOGUE RADIO ANTENNA 450 MHZ (70 CM)	RMA26S-7B2	TNC female
ANALOGUE RADIO ANTENNA 160 MHZ (2 M)		TNC female

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