

## MESA 26 Cab Radio (Single-/Dual-Mode)

# CR26S



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, SPI026S). 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 -fre-

quency range in the following frequencies:

- » Transmitting frequency range: 873 to 915 MHz
- » 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

## TECHNICAL DATA

### DIMENSION / WEIGHT

Construction	rack
Width	84 TE
Height	3 HE
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

## TECHNICAL DATA

### 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 connector
Connecting the control unit	CON26S	2 x 5-pin M12 female connector (coding A)
Connecting the GPS antenna		SMA female connector
Service interface		4-pin M12 female connector (coding D)
Connection to the on-board power supply	PLFE26-1-20	3-pin female connector (Harting PushPull Power)
Protective earth connector		

## TECHNICAL DATA

### INTERFACES / OPTIONAL CONNECTIONS

Train transit line	UIC26S	25-pin D-Sub female connector
serial data exchange RS232	SDIO26S	9-pin D-Sub female connector
serial data exchange RS422 / RS485		5-pin M9 female connector
digital inputs and digital outputs		15-pin HD-D-Sub female connector
serial data exchange RS422	SPIO26S	5-pin M9 female connector
digital inputs and digital outputs		15-pin D-Sub female connector
analogue radio antenna 450 MHz (70 cm)	RMA26S-7B2	TNC female connector
analogue radio antenna 160 MHz (2 m)		1x TNC female connector

