

Analogue Radio Module for MESA 26

ARM26C



The ARM26C is the analogue radio component of the MESA 26 train radio system in protection class IP20. The device enables operational communication in the following analogue radio systems:

- 70 cm band according to UIC 751-3
- 2-m-band according to customer-specific requirements

COMPONENTS

The ARM26C consists of two functional units:

- » RMA26C-x: analogue radio module for the respective frequency ranges in the 2 m band and/or 70 cm band
- » PLFE26-1-36: generation of the internal operating voltage

The device is available in the following versions:

- » **ARM26C-2**: 2 m band
- » **ARM26C-7, ARM26C-7B, ARM26C-7ES**: 70 cm band
- » **ARM26C-72, ARM26C-7B2**: 2 m and 70 cm band

B - band switching

7ES - Modified duplex receiver band (normal in the range around 468 MHz, here around 448 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

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TECHNICAL DATA

DIMENSION / WEIGHT

Construction	rack according to IEC 60297-3
Width	84 TE
Height	3 HE
Depth	190.5 mm
Weight	max. 6 kg

POWER SUPPLY

Input voltage	24 V to 110 V (Connection to the on-board power supply)
Tolerances	according to DIN EN 50155
Interruption	according to DIN EN 50155, class S2 (interruption up to 10 ms)
Maximal power consumption	100 W (calculated)
Typical power consumption	12 W / 60 W (in idle mode / with established call)

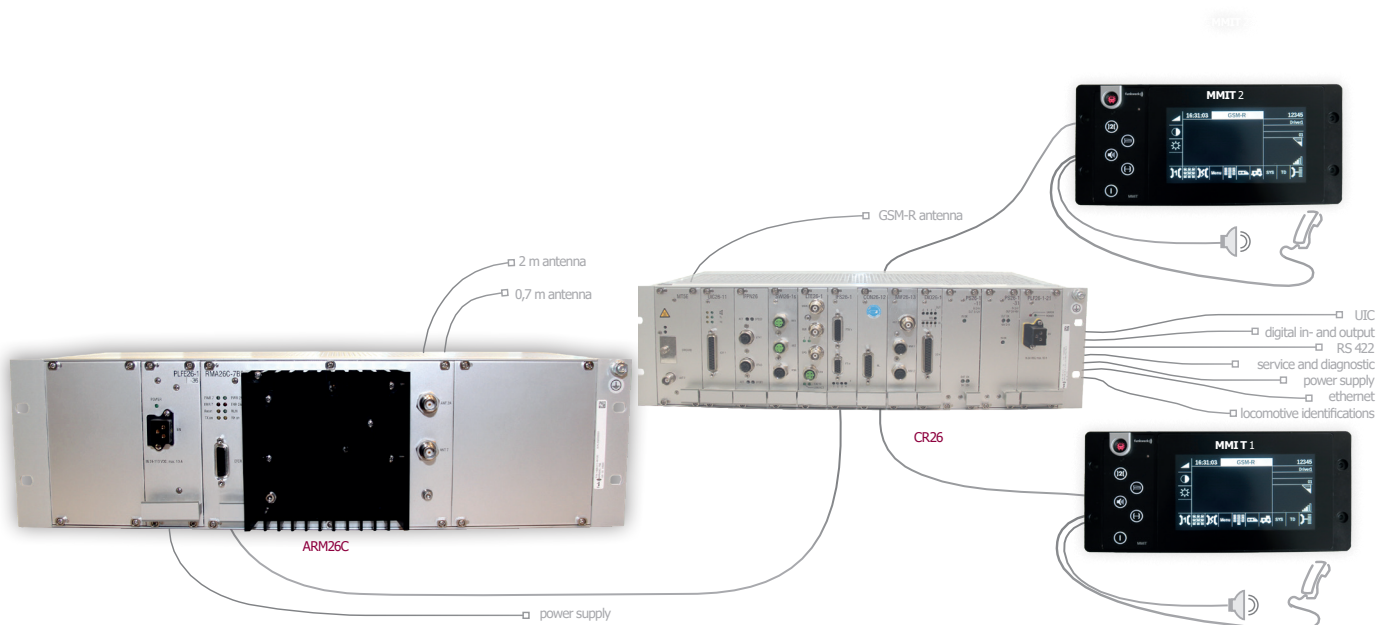
ENVIRONMENTAL CONDITIONS

Protection class	IP20 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

TECHNICAL DATA

CLIMATIC CONDITIONS

Operating temperature range	OT3: -25 °C to +70 °C according to EN 50155
Extended temperature range	ST1: OT3 +15 °C according to EN 50155 (for max. 10 min when switching on)
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



TECHNICAL DATA

RF DATA	2 m band	70 cm band
Modulation type	FM (F3E) or PM (P3E) (channel dependent configurable)	FM (F3E) or PM (P3E)*
Channel spacing	12.5 kHz or 25 kHz configurable	12.5 kHz or 25 kHz*
Rx / Tx time relation	3:1, maximum continual transmission time: 1 to 7 min (depending on the transmission power level)	3:1, maximum continual transmission time 5 min.

Transmitter

Frequency range	146.00 MHz to 174.00 MHz	Upper band (optional)* 467.20 MHz to 468.65 MHz Lower band* 457,20 MHz to 458,65 MHz
RF output power	1 / 2 / 5 / 10 / 25 W (channel dependent configurable)	0.5 / 2 / 6 / 8 / 10 W*
RF channel setting	by RS422	

Receiver

Frequency range	146.00 MHz to 174.00 MHz	Duplex- / Scan receiver: * 467.20 MHz to 468.65 MHz 457.20 MHz to 458.65 MHz 447.20 MHz to 448.65 MHz (depending on hardware variant)
Sensitivity	-107 dBm (according to EN 300086-1 version 2.1.2)	

* depending on the operating mode