

MBR 189



KONGSBERG



MARITIME BROADBAND RADIO

The Maritime Broadband Radio is a smart antenna designed for use in any application where digital high-speed reliable communication and data transfer is crucial for efficient and safe operation. With real-time beamforming, the MBR 189 can adjust the antenna direction for every datagram transmitted within a sector of $100^\circ \times 100^\circ$. In addition to absolute position from a built-in GNSS-receiver the MBR189 calculate relative position vector for every datagram received and hence provides a GNSS-independent relative position vector to the remote unit. The MBR 189 is suitable for maritime land-to-sea communication and for ground stations for manned and unmanned aircraft operations.

TECHNICAL SPECIFICATIONS

PERFORMANCE

Range

Operational range ¹⁾	50 km
User data	0.7 to 16.5 Mbps

Antenna coverage

High-range area	100 degrees azimuth 100 degrees elevation
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RF specifications

Frequency band ²⁾	4900 MHz to 5900 MHz
Channel bandwidth	20 MHz
Tx power	Up to 4 W
Antenna gain	24 dBi
EIRP	Max 60 dBm
Modulation	GMSK
Internal antenna elements	60

INTERFACES

Data	1 x Ethernet, RJ-45
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WEIGHTS AND DIMENSIONS

MBR Unit	16 kg, 500 x 500 x 318 mm
MBR Power Supply	6.4 kg, 88.1 x 485 x 334.75 mm

POWER

MBR Unit

Max. power consumption	210 W
RX only	70 W

MBR Power Supply

Supply voltage	110 to 240 V AC
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ENVIRONMENTAL SPECIFICATIONS

Operating temperature range

MBR Unit	-30 °C to +55 °C
MBR Power Supply	-15 °C to +55 °C

Operating humidity

MBR Unit	20 to 100 % RH
MBR Power Supply	Max. 95 % non-condensing

Storage humidity

MBR Unit (recommended)	20 to 70 % RH
MBR Power Supply	Less than 55 %

Ingress protection

MBR Unit	IP66
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STANDARDS AND REGULATIONS

Electromagnetic compatibility

Compliance to EMC/CD, immunity/emission	IEC 60945/EN 60945
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Product safety

Compliance to LVD, standard used	IEC 60950/EN 60950
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¹⁾ Operational range is dependent on antenna placement and height
²⁾ Configurable range for the single 20 MHz channel

Specifications subject to change without any further notice.

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