





Maritime Broadband Radio

The Maritime Broadband Radio (MBR) is a smart antenna designed for use in maritime applications where digital high-speed reliable communication and data transfer are crucial for efficient and safe operations. The MBR 144 MK2 Submersible allows for resilient and long-range data exchange for surfaced subsea vehicles. The MBR 144 MK2 Submersible is certified for 1000 metres depth and has integrated antennas. The sole connection to the MBR 144 MK2 Submersible is one connector for power and Ethernet.

Technical specifications

Performance

User data throughput 0.7 - 16.5 Mbps

Antenna coverage

Omni-directional 360 degrees azimuth

RF specifications

Frequency band¹ 4900 - 5900 MHz
Channel bandwidth 20 MHz
Tx power Up to 2 W
Antenna gain 7 dBi
EIRP Up to 40 dBm
Modulation GMSK
Internal antenna elements 4

Interfaces

Ethernet/Power connector Data interface 1 x MacArtney Subconn Ethernet 10/100 baseT

Weight and dimensions

 $\begin{array}{ll} \text{Dimensions} & 548 \times 98 \times 98 \text{ mm} \\ \text{Weight} & 2.3 \text{ kg} \\ \text{Weight submerged} & 0.8 \text{ kg} \end{array}$

1 Configurable range for the single 20 MHz channel.

Power specifications

Supply voltage 24 VDC
Power consumption, full Tx
Power consumption, Rx only 7 W

Environmental specifications

Operating temperature -30 °C - +55 °C Pressure rating 1000 m

Standards and regulations

MBR is in confirmity with RED directive 2014/53/EU

EMC ETSI EN 301 843-1 ETSI EN 301 843-7 IEC 60945/EN 60945

Radio ETSI EN 303 276

Product safety IEC 61010-1/EN 61010-1

Environmental IEC 60945/EN 60945

Specifications subject to change without any further notice.

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