





Maritime Broadband Radio

The Maritime Broadband Radio (MBR) is a smart antenna designed for use in any application where resilient high-speed communication and high-capacity data transfer are crucial for efficient and safe operation. With real-time beamforming, the MBR 189 MK2 adjusts the antenna direction for every IP datagram transmitted within a sector of 100° x 100°. This operational sector can be increased by mounting multiple radio units together, giving up to 360° azimuth coverage. The MBR 189 MK2 is suitable for maritime land-to-sea communication and for ground stations for manned and unmanned aircraft operations.

Technical specifications

Performance

User data throughput 0.7 - 16.5 Mbps

Antenna coverage

 1x MBR 189 MK2
 100° Az x 100° EI

 2x MBR 189 MK2
 180° Az x 100° EI

 3x MBR 189 MK2
 270° Az x 100° EI

 4x MBR 189 MK2
 360° Az x 100° EI

RF specifications

Frequency band¹ 4900 - 5900 MHz
Channel bandwidth 20 MHz
Antenna gain 24 dBi
EIRP Up to 60 dBm
Modulation GMSK

Internal antenna elements 60

Interfaces

Ethernet/Power connector 1 x MIL-STD-38999 13-26
Marine Bronze

Data interface Ethernet 10/100 baseT

Weight and dimensions

Dimensions 323 × 323 × 111 mm

Weight 8.5 kg

Power specifications

Supply voltage 24 - 48 VDC Power consumption, full Tx Power consumption, Rx only 70 W

Environmental specifications

Operating temperature -40 °C - +55 °C Ingress protection IP66

Standards and regulations

MBR is in conformity 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

DNVGL-CG-0339 (48 VDC) IACS E10 (48 VDC)

1 Configurable range for the single 20 MHz channel

Specifications subject to change without any further notice.