





## **Maritime Broadband Radio**

The MBR 189 MK2 Portable is a kit consisting of a MBR 189 MK2 radio, tripod and cables for quick deployment. The MBR MK2 Portable is delivered in two transportation hard cases and is perfect to use both on shore and on vessels which requires quick deployment for temporary operation. 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 Portable 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 radios together, giving up to 360° azimuth coverage. The MBR 189 MK2 Portable 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
Tx power Up to 4 W
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  $323 \times 323 \times 111 \text{ mm}$ Weight 8.5 kgTransportation case 1  $17. \text{ kg}, 100 \times 47 \times 17 \text{ cm}$ Transportation case 2  $20.4 \text{ kg}, 46 \times 31 \times 61 \text{ cm}$ 

1 Configurable range for the single 20 MHz channel

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)

Specifications subject to change without any further notice.