

# MBR 189 MK2



KONSGBERG



## 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 band<sup>1</sup> 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 x 323 x 111 mm  
Weight 8.5 kg

### Power specifications

Supply voltage 24 - 48 VDC  
Power consumption, full Tx 210 W, max.  
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)

<sup>1</sup> Configurable range for the single 20 MHz channel

Specifications subject to change without any further notice.