

Raven GPS Antennas



Raven GPS designs and manufactures antennas for nearly all GPS needs and applications. Raven antennas are housed in waterproof enclosures and are available in a variety of different base mounts. Raven's antennas are the latest innovation in combining GPS, L-Band and H-Field MSK DGPS radiobeacon antenna technology.

RAVEN TBA-2 ANTENNA

Raven's TBA-2 antenna is the smallest and lightest package available in the industry. The TBA-2 antenna meets or exceeds all the recommended requirements for the United States Coast Guard (USCG), Army Corps of Engineers (ACOE), and the International Associations of Lighthouse Authorities (IALA).



The TBA-2 antenna is designed to operate with all existing GPS/Radiobeacon receivers. A wide operating voltage range and very low current requirements make the TBA-2 an excellent replacement antenna.

FEATURES

- Small & light; ideal for man-portable applications
- Interchangeable mounting options
- No grounding required
- Low susceptibility to noise (precipitation, ignition or other locally generated E-Field noise such as alternators)
- Low power applications (< 25 mA)
- Rugged and waterproof
- TNC connection

SPECS

Radiobeacon Antenna

- Effective Height: 1 ± 0.1 m
- Sensitivity: 2 dB better than minimum requirements
- Bandpass: 283.5 - 325 KHz ± 1 dB
- Gain vs. Azimuth: Omni, ± 1 dB

GPS Antenna

- Bandpass: 1575 MHz ± 2 MHz
- Gain: 26.5 ± 2 dB
- Noise figure: 2.5 dB Max
- Power: 5-10 VDC (other available)

Physical Dimensions

- Diameter: 67 mm (2.65 in)
- Height: 112 mm (4.40 in)
- Weight: 400 g (14 oz)

RAVEN

 **PRECISION**
Solutions

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RAVEN MBA SERIES ANTENNAS

Raven's MBA Series antenna meet or exceed all the recommended requirements for the United States Coast Guard (USCG), Army Corps of Engineers ACOE), and the International Associations of Lighthouse Authorities (IALA).



MBA-1
&
MBA-2

MBA ANTENNA SPECS

Radiobeacon Antenna (All MBA models)

- Effective Height: 1 ± 0.1 m
- Gain vs. Azimuth: Omni, +/- 1 dB
- Bandpass: 283.5 - 325 kHz ± 1 dB
- Sensitivity: -12 dB μ V/m in a 1 Hz band



MBA-6
MBA-3,
MBA-4,
& MBA-6

MBA-1 antenna is designed for radiobeacon applications only.

MBA-2 model is the same as MBA-1 but it also contains a GPS patch antenna with a 4 inch ground plane. The GPS and beacon signals are summed together and output on a single TNC connector.

MBA-3 model is a GPS/L-band helix antenna.

MBA-4 model is a combination GPS/L-band helix antenna and DGPS radiobeacon loop antenna integrated into a single unit.

MBA-6 model is a combination L1/L2 GPS/L-band quadrifilar helix antenna and DGPS radiobeacon loop antenna integrated into a single unit.

GPS Antenna (MBA-2 only)

- Bandpass: 1575 MHz ± 2 MHz
- Gain: 26.5 ± 2 dB
- Noise figure: 2.5 dB Max
- Power: 5-10 VDC (other available)

GPS / L-band Helical Antenna (MBA-3 and MBA-4)

- Frequency: 1525 - 1625 MHz
- Gain: 38 ± 2 dB (max)
- Noise figure: 2.5 dB (max)
- Impedence: 50 Ω

L1/L2/L-band Quadrifilar Helix Antenna (MBA-6 Only)

- Frequency: 1227 ± 10 MHz, 1575 ± 50 MHz
- Gain: 38 ± 2 dB (max)
- Noise Figure: 2.5 dB (max)
- Impedence: 50 Ω

MBA FEATURES

- Interchangeable mounting options
- No grounding required
- Low susceptibility to noise (precipitation, ignition or other locally generated E-Field noise such as alternators)
- Low power applications
- Rugged and waterproof
- TNC connection

RAVEN PATCH ANTENNA

Fully waterproof GPS antenna that provides continuous L1 band with high gain and low power consumption.

RPA FEATURES

- Waterproof
- Low power applications
- 5 meter cable with BNC connector



RPA ANTENNA SPECS

- Bandpass: 1575 MHz ± 2 MHz
- Gain: 26.5 ± 2 dB
- Noise figure: 2.5 dB (max)
- Power: 5-10 VDC (other available)



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