

BA1312

Features

This lightweight antenna with a broad frequency band and rugged construction is ideal for both base station and marine deployments. Radiating elements are encased in a weather-resistant, low-loss fiberglass radome. The size and mounting fixtures allow for easy storage and fast installation. Ideal for use where reliability is of the utmost importance. With a sturdy and strong construction, these antennas have been designed for a long lifetime.

- 3 dBd (5.2 dBi), vertically polarized, omnidirectional base station and marine antenna, covering the VHF band
- Shipped with the sturdy "LW" mast mount - a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminum
- The accompanying U-bolts and fittings are made of stainless steel
- Can be mounted vertically or horizontally on 16-54 mm (0.6-2.1 in) diameter mast tubes
- Cable can be led either on the outside or along the inside of the mast tube
- Wide bandwidth with respect to both VSWR and gain
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane with the level of the sidelobes reduced to a minimum
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable
- Vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna



PRODUCT OVERVIEW	Antenna Type	Base Station and Marine, Fiberglass Omni, Collinear, Broad-Band
	Frequency Range (MHz)	149-171
	Connector	1 Port
	Polarization	Vertical
	Gain	3 dBd (5.2 dBi)
	Overall Height	2800 mm (110.2 in)

ORDERING OPTIONS

Select from the following ordering options

ANTENNA MODEL NUMBER	MOUNTING HARDWARE	SHIPPING WEIGHT
BA1312	Universal Stainless Steel Mast Mounting Clamp (LW-SS-1)	2.55 kg (5.6 lbs)

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ELECTRICAL SPECIFICATIONS

Frequency Range	MHz	149-171
Polarization	---	Vertical
Gain	dBd (dBi)	3.0 (5.2)
Azimuth Beamwidth (3 dB)	degrees	Omnidirectional
Elevation Beamwidth (3 dB)	degrees	30°
Impedance	Ohms	50Ω
VSWR	---	< 1.5:1
Bandwidth	---	22 MHz
Maximum Input Power	Watts	150 W
Antistatic Protection	---	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	---	HCM000ND00, 015DE50

MECHANICAL SPECIFICATIONS

Overall Height		mm (in)	Approx. 2800 (110.2)
Diameter at Top End		mm (in)	Ø23 (0.9)
Diameter at Bottom End		mm (in)	Ø23 (0.9)
Mounting		---	On 16-54 mm (0.6-2.1 in) diameter mast tube
Net Weight - Antenna Only		kg (lbs)	Approx. 1.4 (3.1)
Wind Area		m² (ft²)	0.0651 (0.70)
Wind Load at 160 km/h (99 mph)		N (lbf)	82 (18)
Connector Type		---	(1x) N Female at Bottom
Connector Torque		Nm	0.7-1.1
Radome Material		---	Polyurethane-Coated Fiberglass
Radome Color		---	White RAL9003
Mounting Hardware Material		---	Mounting bracket: Seawater-resistant aluminum, epoxy-coated Clamps: Stainless steel
Packaging Information	Shipping Weight	kg (lbs)	2.55 (5.6)
	Packing Dimensions Cardboard Box Telescope Length x Width x Depth	mm (in)	3000 x 110 x 110 (118.1 x 4.3 x 4.3)
	Shipping Comment	---	Universal stainless steel mast mounting clamp (LW-SS-1) packed separately


Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

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ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range	degrees	-30° to +70° C (-22° to +158° F)
Survival Wind Speed	km/h (mph)	200 (124)
Ingress Protection	---	IP66

INSTALLATION Please read all installation notes before installing product.

	Always attach the antenna using all mounting points.
	Do not install antenna with the connectors facing upwards.

EXTERNAL DOCUMENT LINKS

[Universal stainless steel mast mounting clamp \(LW-SS-1\)](#)

NOTES

For Radiating Patterns: [Request pattern files](#)