149-171 MHz

3 dBd (5.2 dBi)

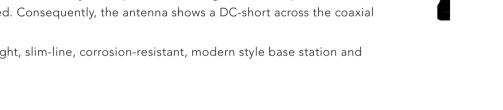
N Female

## **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
- Vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna



OVERVIEW	Antenna Type	Base Station and Marine, Fiberglass Omni, Collinear, Broad-Band
	Frequency Range (MHz)	149-171
	Connector	1 Port
5	Polarization	Vertical
PRODL	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)

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.

## 1-Port Omnidirectional Antenna

149-171 MHz

3 dBd (5.2 dBi) N Female

# BA1312

### **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
	Shipping Weight	kg (lbs)	2.55 (5.6)
Packaging Information	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

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## 1-Port Omnidirectional Antenna

149-171 MHz

3 dBd (5.2 dBi)

N Female

## **BA1312**

### **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

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