

## SB-230



### 2 - 30 MHz Broadband HF Shipboard Marine Antenna

#### FEATURES

The **SB-230** HF omni-directional antenna is a broadband, vertically polarized antenna primarily designed for shipboard use, but can also be used as a fixed base station with a suitable ground screen. The antenna operates over the frequency band of 2 MHz to 30 MHz without the need of a tuner or coupler. It has a power handling capability of 1kW, average. The monopole is 35 feet long and is constructed in two sections, which screw together. The base of the monopole is a flanged coaxial design which bolts directly to the Antenna Base Unit.

RUGGED, FULLY SHIPBOARD QUALIFIED HF ANTENNA

HIGH POWER RATING, UP TO 1000 WATTS

EFFECTIVE BROADBAND COVERAGE OF THE ENTIRE FREQUENCY RANGE

#### **ELECTRICAL**

FREQUENCY RANGE	2-30 MHz
POLARIZATION	Vertical
RADIATION PATTERN	Omnidirectional
VSWR	≤ 2.0:1 typical, 3.0:1 max
NOMINAL IMPEDANCE	50 Ω
POWER RATING (RMS)	1000 W (1kW) average

#### **ENVIRONMENTAL**

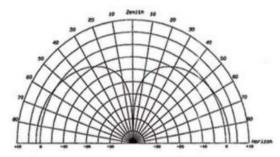
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TEMPERATURE	-54°C to +65°C
HUMIDITY	0-100%
SHOCK	MIL-STD-901C, Grade A, Class 1
VIBRATION	MIL-STD-167-1, Type I
WIND SPEED	100 knots
ICE	4.5 PSD on All exposed Surfaces
DUST	Test per MIL-STD-810 Method 510.2

#### **MECHANICAL**

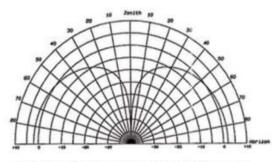
ANTENNA TYPE	Boradband HF Whip
STANDARD COLOR	Haze Grey
RF CONNECTOR	Female N-type
MOUNTING	8 each 0.56" (1.42 cm) diameter bolt holes on a 15.25" (38.7 cm) bolt circle
HEIGHT (overall)	35.3 feet (10.76 meters)
DIAMETER	3.5 inch (8.9 cm) tapered
WEIGHT	175 pounds (79.4 kg)



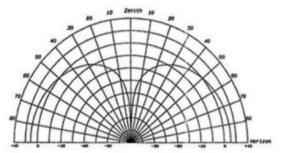
# SB-230



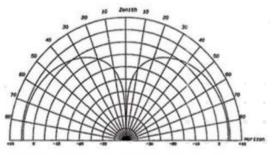
Elevation Pattern - 2 MHz Vertical Polarization Gain: 1.69 dBi without AMU



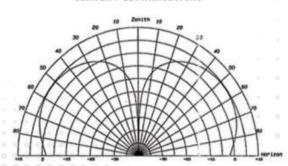
Elevation Pattern - 5.16 MHz Vertical Polarization Gain: 1.92 dBi without AMU



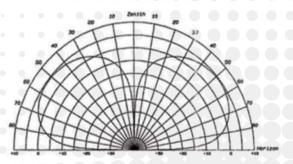
Elevation Pattern - 10.16 MHz Vertical Polarization Gain: 2.77 dBi without AMU



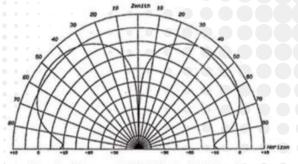
Elevation Pattern - 15.24 MHz Vertical Polarization Gain: 4.38 dBi without AMU



Elevation Pattern - 19.99 MHz Vertical Polarization Gain: 4.75 dBi without AMU



Elevation Pattern - 26.2 MHz Vertical Polarization Gain: 4.61 dBi without AMU



Elevation Pattern - 30 MHz Vertical Polarization Gain: 6.55 dBi without AMU