



SB-103 / 106

■ UHF OMNIDIRECTIONAL

■ VERTICALLY POLARIZED

■ EXTREME MARINE ENVIROMENT

Characteristics:

These UHF shipboard antennas are designed for transmit and receive applications. They provide vertically polarized, omni-directional coverage within the specified frequency range. The antennas are enclosed in fiberglass housing, making them suitable for use in extreme marine shipboard environments. The dipole antenna design allows for mounting the antennas in proximity to ship structures without significantly degrading antenna performance.

These antennas are cylindrically dipole radiator fed by a conventional coaxial RF line. Integrated into the antenna structure is a balancing transformer arrangement, which allows the dipole radiator to be fed in a balanced manner eliminating extraneous line currents.

Radiation patterns for the antenna correspond to those of a balanced dipole in free space. Coverage in the plane perpendicular to the radiating elements is omnidirectional. Figure 8 coverage, with nulls off the ends of the elements, is provided in the plane of the radiators. The inherent broadband impedance characteristics make the antenna relatively insensitive to its mounting environment and minimize azimuth and zenith pattern distortion at any location.

The standard color supplied is haze gray however the antennas can be provided in other colors, as requested. The radome is painted with three coat paint system. All external metal parts are either powder coated or 316 stainless steel for maximum corrosion resistance.

The SB-103/1 is a mil nomenclature AS-2810.



SPECIFICATIONS:

Polarization:	Vertical
Azimuth Beamwidth:	Omnidirectional
Application:	Transmitting or Receiving
Customer Input:	Type "N" female
Temperature Range-	
Operating:	-54° C to +65°
Non-Operating:	-62° C to +71° C
Dust (fine sand):	Test per MIL-STD-810 Method 510.2
Shock:	MIL-S-901C, Grade A, Class I
Vibration:	MIL-STD-167-1, Type I
Humidity:	0 to 100%
Wind:	100 knots
Ice:	4.5 psf on all exposed surfaces
Salt Fog (spray):	Withstands 100 hrs test
Construction:	Fiberglass housing, aluminum mounting flange
Mounting:	1/4" bolts on a 3.88 inch bolt circle



MODEL:	SB-103/1	SB-104	SB-106/1
Frequency:	225-400 MHz	350-500 MHz	400-520 MHz
VSWR:	2.5:1 maximum	2.5:1 maximum	2:1 maximum
Forward Gain:	2 dBi	2 dBi	3 dBi minimum
Power Handling:	500 watts	100 watts	100 watts
Height:	40 inches	47 inches	52 inches
Housing Diameter:	3 inches	3 inches	3 inches
Base:	4.5 inches dia	4.5 inches dia	4.5 inches dia
Weight:	7 lbs	7.5 lbs	9 lbs
Shipping Weight:	N/A	N/A	30 lbs
Military Designation:	AS-2810	N/A	N/A
Part Number:	1000-2044-401	1000-2107-201	1000-2119-201