

## BICONICAL ANTENNAS

The **VBC series** of Vertical Biconical antennas are intended for all-weather applications. **VBC** antennas are well isolated from the base, resulting in a predictable elevation pattern and reduction in common mode interference. The **VBC** series antennas are designed to withstand laminar wind flow velocities in excess of 100 miles per hour. Antenna elements are removable for ease of transport and storage. An optional cross arm mounting adaptor allows the **VBC-310** to be mounted from the center to manually adjust the polarization. When transmitting below 50 MHz, the use of a coupler or a matching network is recommended. When used for receive only or wideband spectrum surveillance applications, it is preferable to use Model **VBC-310/A**, which includes a low noise preamplifier.



**VBC-310/A**



**VBC-40**

### SPECIFICATIONS

IMPEDANCE: 50 Ohms

WIND AND ICE: 100 mph with 1/4" radial ice

TEMPERATURE: -50° C to +85° C

	VBC-310	VBC-310/A	VBC-40	VBC-60	VBC-150
<b>FREQUENCY (MHZ)</b>	50 - 1000	30 - 1000	27 - 100	50 - 150	120 - 250
<b>POLARIZATION</b>	Vertical	Vertical	Vertical	Vertical	Vertical
<b>VSWR (TYP.)</b>	<3 : 1	2 : 1	2 : 1	2 : 1	2 : 1
<b>INPUT POWER MAX.</b>	1 kW	Rx only	1 kW	1 kW	1 kW
<b>TYPICAL GAIN</b>	0 dB	14.5 dB with Preamplifier	0 dB	0 dB	0 dB
<b>CONNECTOR</b>	N female	N female	N female	N female	N female
<b>HEIGHT</b>	10' with Mast	10' with Mast	13'	10'	4.5'
<b>DIAMETER</b>	6'	6'	60"	44"	30"
<b>WEIGHT (LBS / KG)</b>	35 / 15.75	35 / 15.75	19 / 8.5	18 / 8.1	10 / 4.5
		Active Receive Only			

## SLANT LINEAR (V, H, RHCP, LHCP)

Our **BSB series** broadband slant linear polarized and stackable biconical antennas offer excellent omnidirectional performance. The typical biconical radiation pattern makes these antennas ideally suited for reception of signals on the horizon for nautical and broadband surveillance applications. The slant linear polarization makes them suitable for receiving vertical, horizontal, and circularly polarized signals. **BSB series** antennas transmit 45° slant linear polarized RF signals. Multiple antennas can be stacked for extremely wideband operation. The stacked antenna models are available with multiple connectors (one for each band) or a single broadband output connector. All **BSB series** antennas are sealed in low loss dielectric radomes for shipborne and other outdoor applications.

	<b>BSB-418</b>	<b>BSB-26</b>
<b>FREQUENCY RANGE</b>	4 - 18 GHz	2 - 6 GHz
<b>RADIATION PATTERN</b>	Omni	Omni
<b>VERT. PLANE BEAMWIDTH</b>	50-18 deg.	50 - 18 deg.
<b>POLARIZATION</b>	45° Linear	45° Linear
<b>AVERAGE VSWR</b>	2:1	2:1
<b>TYPICAL GAIN</b>	0 dBi	0 dBi
<b>IMPEDANCE</b>	50 Ω	50 Ω
<b>SIZE</b>	6" x 6" x 5"	3" D x 4" H
<b>CONNECTOR</b>	SMA	SMA



**BSB-418**

## SPECIFICATIONS

### Slant Linear Antennas

	<b>BSB-118</b>	<b>BSB-14</b>	<b>BSB-0518</b>
<b>FREQUENCY (GHz)</b>	1.0 - 18.0	1.0 - 4.0	0.5 - 18.0
<b>POLARIZATION</b>	Slant linear	Slant Linear	Slant Linear
<b>GAIN, COPOLARIZED</b>	0 dBi	0 dBi	0 dBi
<b>OMNI PATTERN DEVIATION</b>	< 3 dB	3 dB	< 3 dB
<b>IMPEDANCE</b>	50 Ohm	50 Ohm	50 Ohm
<b>VSWR (MAX.)</b>	3 : 1	3 : 1	3 : 1
<b>VSWR (AVG.)</b>	2 : 1	2 : 1	2 : 1
<b>CW POWER (W)</b>	15	50	15
<b>CONNECTOR TYPE(S)</b>	N, SMA	N	N, SMA, SMA
<b>SIZE</b>	12"D x 12.5"H	12"D x 7.5"H	20"D x 28"H
<b>OUTPUT PORTS AND FREQUENCY BANDS</b>	2 1.0 - 4.0 GHz 4.0 - 18.0 GHz	1 1.0 - 4.0 GHz	3 0.5 - 2.0 GHz 2.0 - 6.0 GHz 6.0 - 18.0 GHz