



## SBNHH-1D45C

**6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 3x RET**

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Three internal RETs for independent tilt on all three bands

### Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	18.3	18.6	19.6	20.2	20.5	21.0
Beamwidth, Horizontal, degrees	47	43	44	43	42	39
Beamwidth, Vertical, degrees	8.9	8.2	5.8	5.3	5.1	4.5
Beam Tilt, degrees	0–10	0–10	0–8	0–8	0–8	0–8
USLS (First Lobe), dB	17	16	20	20	19	16
Front-to-Back Ratio at 180°, dB	30	31	33	35	35	36
CPR at Boresight, dB	25	19	20	24	17	17
CPR at 10 dB Horizontal Beamwidth, dB	11	16	10	10	10	10
Isolation, dB	25	25	25	25	25	25
Isolation, Intersystem, dB	30	30	30	30	30	30
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	350	350	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

### Electrical Specifications, BASTA\*

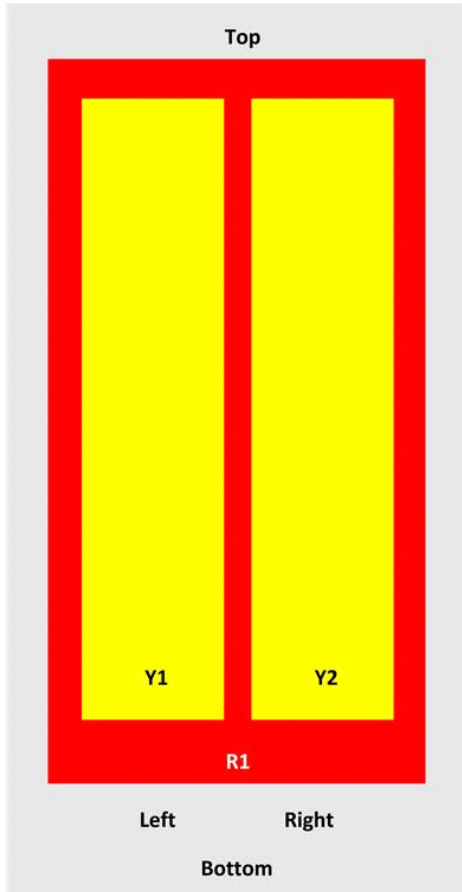
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	17.9	18.5	19.2	20.0	20.3	20.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.2	±0.5	±0.4	±0.4	±0.4
Gain by Beam Tilt, average, dBi	0°   17.8	0°   18.4	0°   19.2	0°   20.0	0°   20.2	0°   20.8
	5°   18.0	5°   18.6	4°   19.3	4°   20.0	4°   20.3	4°   20.9
	10°   17.9	10°   18.4	8°   19.0	8°   19.8	8°   20.1	8°   20.5
Beamwidth, Horizontal Tolerance, degrees	±1.6	±2.3	±1.8	±0.9	±1	±1.6
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.3	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	16	16	16	16	17	16
Front-to-Back Total Power at 180° ± 30°, dB	24	25	29	31	32	33
CPR at Boresight, dB	25	22	22	26	21	19
CPR at 10 dB Horizontal Beamwidth, dB	14	18	13	11	11	12

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

### Array Layout

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**SBNHH 45 85**



Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXXXXXX.1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXXXXXX.2
Y2	1695-2360	5-6	3	ANXXXXXXXXXXXXXXXXX.3

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

## General Specifications

Operating Frequency Band	1695 – 2360 MHz   698 – 896 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage

## Mechanical Specifications

RF Connector Quantity, total	6
RF Connector Quantity, low band	2
RF Connector Quantity, high band	4
RF Connector Interface	7-16 DIN Female

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Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum   Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	1460.0 N @ 150 km/h 328.2 lbf @ 150 km/h
Wind Loading, lateral	325.0 N @ 150 km/h 73.1 lbf @ 150 km/h
Wind Loading, rear	1534.0 N @ 150 km/h 344.9 lbf @ 150 km/h
Wind Speed, maximum	241 km/h   150 mph

## Dimensions

Length	2437.0 mm   95.9 in
Width	457.0 mm   18.0 in
Depth	178.0 mm   7.0 in
Net Weight, without mounting kit	36.1 kg   79.6 lb

## Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (2)   Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Multi-RET)
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	1 female   1 male

## Packed Dimensions

Length	2559.0 mm   100.7 in
Width	567.0 mm   22.3 in
Depth	311.0 mm   12.2 in
Shipping Weight	55.8 kg   123.0 lb

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU  
China RoHS SJ/T 11364-2006  
ISO 9001:2008

### Classification

Compliant by Exemption  
Above Maximum Concentration Value (MCV)  
Designed, manufactured and/or distributed under this quality management system



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## Included Products

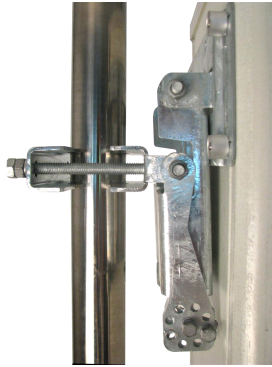
**BSAMNT-1** — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

**BSAMNT-M** — Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

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## \* Footnotes

Performance Note      Severe environmental conditions may degrade optimum performance



## BSAMNT-1

**Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.**

### General Specifications

Application	Outdoor
Includes	Brackets   Hardware
Package Quantity	1

### Mechanical Specifications

Color	Silver
Material Type	Galvanized steel

### Dimensions

Compatible Diameter, maximum	115.0 mm   4.5 in
Compatible Diameter, minimum	60.0 mm   2.4 in
Net Weight	6.0 kg   13.3 lb

### Regulatory Compliance/Certifications

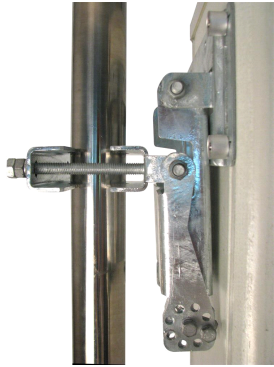
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## BSAMNT-M

**Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.**

### General Specifications

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Application	Outdoor
Includes	Brackets   Hardware
Package Quantity	1

### Mechanical Specifications

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Color	Silver
Material Type	Galvanized steel

### Dimensions

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Compatible Diameter, maximum	115.0 mm   4.5 in
Compatible Diameter, minimum	60.0 mm   2.4 in
Net Weight	4.5 kg   9.9 lb

### Regulatory Compliance/Certifications

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#### Agency

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China RoHS SJ/T 11364-2006  
ISO 9001:2008

#### Classification

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