# SBNHH-1D85C



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz,  $85^{\circ}$  HPBW, 3x RET

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

#### **OBSOLETE**

This product was discontinued on: March 30, 2024

### General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

**Grounding Type**RF connector inner conductor and body grounded to reflector and

mounting bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

**Radome Material** Fiberglass, UV resistant

Radiator Material Aluminum I Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 7-16 DIN Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, mid band

RF Connector Quantity, low band

2

RF Connector Quantity, total

6

### Remote Electrical Tilt (RET) Information

**RET Interface** 8-pin DIN Female | 8-pin DIN Male

**RET Interface, quantity** 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET High band (2) | Low band (1)

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Power Consumption, idle state, maximum 2 W

Power Consumption, normal conditions, maximum 13 W

Protocol 3GPP/AISG 2.0 (Multi-RET)

**Dimensions** 

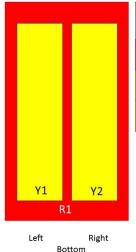
 Width
 301 mm | 11.85 in

 Depth
 180 mm | 7.087 in

 Length
 2438 mm | 95.984 in

Net Weight, without mounting kit 22.5 kg | 49.604 lb

### Array Layout



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

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

### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2360 MHz | 698 – 896 MHz

Polarization ±45°

## **Electrical Specifications**

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	2300-2360
Gain, dBi	15.6	15.6	17	17.6	17.9	17.8
Beamwidth, Horizontal, degrees	81.5	83	81.5	79	79	79.7
Beamwidth, Vertical, degrees	8.9	8.1	5.6	5.2	5	4.6

Page 2 of 3



# SBNHH-1D85C

Beam Tilt, degrees	0-10	0-10	0-8	0-8	0-8	0-8
USLS (First Lobe), dB	16	17	14	14	14	15
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	25	25	25	25
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 at 50°C, maximum, watts	300	300	300	300	300	250

### Mechanical Specifications

Effective Projective Area (EPA), frontal $0.37 \text{ m}^2$  |  $3.983 \text{ ft}^2$ Effective Projective Area (EPA), lateral $0.31 \text{ m}^2$  |  $3.337 \text{ ft}^2$ 

 Wind Loading @ Velocity, frontal
 393.0 N @ 150 km/h (88.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 330.0 N @ 150 km/h (74.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 757.0 N @ 150 km/h (170.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 398.0 N @ 150 km/h (89.5 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

### Packaging and Weights

 Width, packed
 409 mm | 16.102 in

 Depth, packed
 299 mm | 11.772 in

 Length, packed
 2561 mm | 100.827 in

 Weight, gross
 32.6 kg | 71.871 lb

## Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

### Included Products

BSAMNT-2F – Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

### \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

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