

## SBNH-1D8585B

Smartbeam® DualPol® Dual Band Teletilt® Antenna, 698–896 MHz and 1710–2180 MHz, 85° horizontal beamwidth, RET compatible



- Patented dipole technology
- Internal next generation actuator eliminates field installation and defines new standards for reliability

## CHARACTERISTICS

### General Specifications

Antenna Type	SmartBeam®
Brand	DualPol®   SmartBeam®   Teletilt®
Operating Frequency Band	1710 – 2180 MHz   698 – 896 MHz

### Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180
Beamwidth, Horizontal, degrees	90	89	85	83	85
Beamwidth, Horizontal Tolerance, degrees	±4	±7	±5	±4	±4
Gain, dBd	11.8	12.3	14.7	14.8	15.2
Gain, dBi	13.9	14.4	16.8	16.9	17.3
Beamwidth, Vertical, degrees	12.5	10.8	5.2	4.7	4.4
Beam Tilt, degrees	0–10	0–10	0–6	0–6	0–6
Upper Sidelobe Suppression (USLS), typical, dB	15	15	16	17	18
Front-to-Back Ratio at 180°, dB	25	25	27	28	28
Front-to-Back Total Power at 180° ± 20°, dB	19	19	24	24	24
Cross Polarization Ratio (CPR) at Boresight, dB	23	22	20	20	20
Cross Polarization Ratio (CPR) at Sector, dB	10	10	8	9	9
Isolation, dB	30	30	30	30	30
Isolation, Intersystem, dB	30	30	30	30	30
VSWR   Return Loss, db	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0	1.5:1   14.0
Intermodulation Products, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	400	400	300	300	300
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm
Lightning Protection	dc Ground	dc Ground	dc Ground	dc Ground	dc Ground

# Product Specifications

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## Mechanical Specifications

Color	Light gray
Connector Interface	7-16 DIN Female
Connector Location	Bottom
Connector Quantity	4
Radome Material	Fiberglass, UV resistant
Wind Loading, maximum	618.5 N @ 150 km/h 139.0 lbf @ 150 km/h
Wind Speed, maximum	241.0 km/h   149.8 mph

## Dimensions

Depth	181.0 mm   7.1 in
Length	1849.0 mm   72.8 in
Width	301.0 mm   11.9 in
Net Weight	20.4 kg   45.0 lb

## Remote Electrical Tilt (RET) Information

Adjustment Time, full range, maximum	30 s
Annual Failure Rate, maximum	0.01%
Power Consumption, during motor movements, maximum	11.0 W
Power Consumption, idle state, maximum	2.0 W
Power Input	10-30 V
Protocol	3GPP/AISG 2.0 Multi-RET
RET Interface	RS-485 Male (input port, 1)   RS-485 Female (daisy chain port ,1)
RET System	Teletilt®

## Regulatory Compliance/Certifications

### Agency

RoHS 2002/95/EC  
China RoHS SJ/T 11364-2006

### Classification

Compliant by Exemption  
Above Maximum Concentration Value (MCV)



## INCLUDED PRODUCTS



### **DB380**

Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

# Product Specifications

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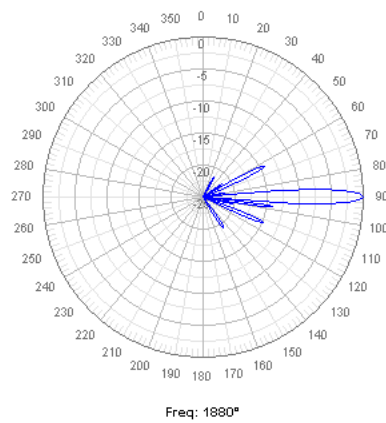
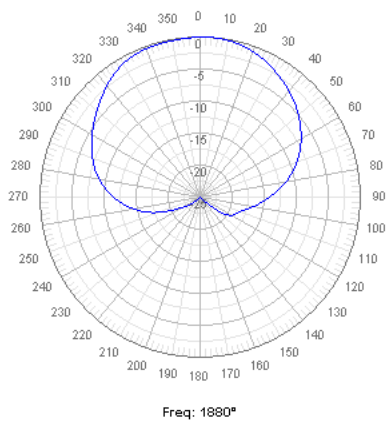
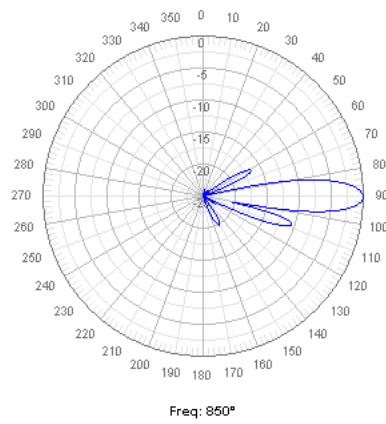
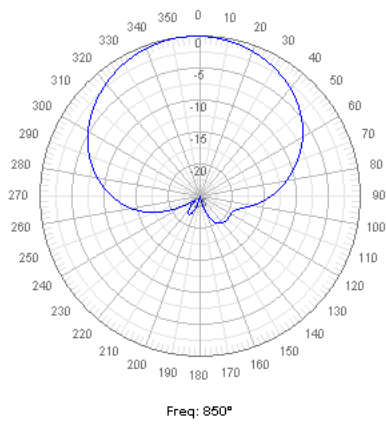
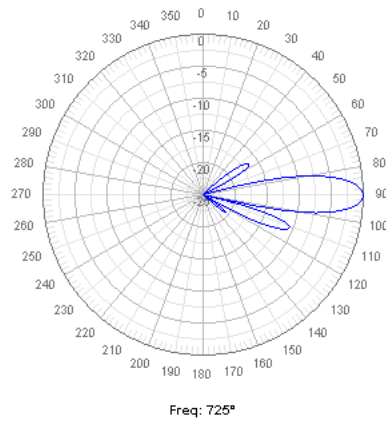
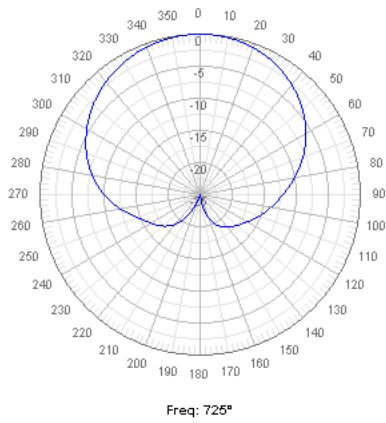
## **DB5083**

Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

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## Horizontal Pattern

## Vertical Pattern



# Product Specifications

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