

# FF-65B-R1



4-port sector antenna, 4x 617–806 MHz, 65° HPBW, 1x RET, 600MHz-Ready Antenna Technology

- Supports up to 15° of Mechanical Down Tilt

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	4

## Remote Electrical Tilt (RET) Information

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

## Dimensions

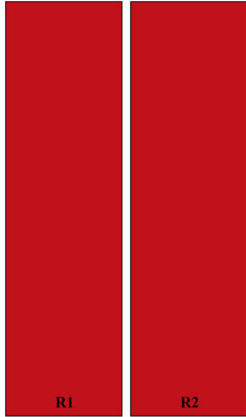
<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	1830 mm   72.047 in

# FF-65B-R1

Net Weight, without mounting kit

39.5 kg | 87.082 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	617-806	1 - 2	65°	1	AISG1	ANxxxxxxxxxxxxxxxxx1
R2	617-806	3 - 4	65°			

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

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	617 – 806 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	617–698	698–806
<b>Gain, dBi</b>	14.1	14.5
<b>Beamwidth, Horizontal, degrees</b>	66	60
<b>Beamwidth, Vertical, degrees</b>	14.8	13.3
<b>Beam Tilt, degrees</b>	2–14	2–14
<b>USLS (First Lobe), dB</b>	19	17
<b>Front-to-Back Ratio at 180°, dB</b>	34	30
<b>Isolation, Cross Polarization, dB</b>	28	28
<b>Isolation, Inter-band, dB</b>	28	28
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>		-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250

## Electrical Specifications, BASTA

Frequency Band, MHz	617–698	698–806
---------------------	---------	---------

# FF-65B-R1

<b>Gain by all Beam Tilts, average, dBi</b>	13.7	14.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.6
<b>Gain by Beam Tilt, average, dBi</b>	2°   13.5 8°   13.7 14°   13.6	2°   13.9 8°   14.2 14°   14.1
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.4	±4.0
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1	±1
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	17
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	21
<b>CPR at Boresight, dB</b>	21	26
<b>CPR at Sector, dB</b>	7	9

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	765.0 N @ 150 km/h (172.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	251.0 N @ 150 km/h (56.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,041.0 N @ 150 km/h (234.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	387 mm   15.236 in
<b>Length, packed</b>	1982 mm   78.032 in
<b>Weight, gross</b>	50.5 kg   111.333 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

# FF-65B-R1

---

BSAMNT-4

- 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.

## \* Footnotes

### **Performance Note**

Severe environmental conditions may degrade optimum performance