

FF-65C-R1



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

- Supports up to 10° of Mechanical Down Tilt

General Specifications

Antenna Type	Sector
Band	Single band
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 Low loss circuit board
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, low band	4
RF Connector Quantity, total	4

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	Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

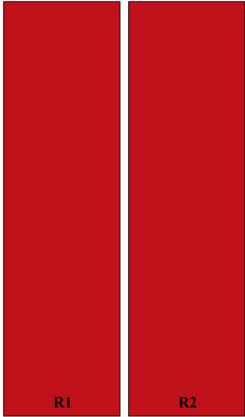
Width	640 mm 25.197 in
Depth	235 mm 9.252 in
Length	2437 mm 95.945 in

FF-65C-R1

Net Weight, without mounting kit

53.5 kg | 117.947 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)

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	617 – 806 MHz
Polarization	±45°

FF-65C-R1

Total Input Power, maximum

500 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	617–698	698–806
Gain, dBi	15.4	15.6
Beamwidth, Horizontal, degrees	64	63
Beamwidth, Vertical, degrees	10.3	9.2
Beam Tilt, degrees	2–13	2–13
USLS (First Lobe), dB	19	17
Front-to-Back Ratio at 180°, dB	33	31
Isolation, Cross Polarization, dB	28	28
Isolation, Inter-band, dB	28	28
VSWR Return loss, dB	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc		-153
Input Power per Port at 50°C, maximum, watts	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	617–698	698–806
Gain by all Beam Tilts, average, dBi	15	15.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5
Gain by Beam Tilt, average, dBi	2° 14.8 8° 15.1 13° 15.0	2° 15.0 8° 15.4 13° 15.2
Beamwidth, Horizontal Tolerance, degrees	±3.3	±4.0
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.7
USLS, beampeak to 20° above beampeak, dB	17	14
Front-to-Back Total Power at 180° ± 30°, dB	22	22
CPR at Boresight, dB	18	20
CPR at Sector, dB	4	10

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,055.0 N @ 150 km/h (237.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,433.0 N @ 150 km/h (322.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

FF-65C-R1

Packaging and Weights

Width, packed	752 mm 29.606 in
Depth, packed	382 mm 15.039 in
Length, packed	2590 mm 101.969 in
Weight, gross	79 kg 174.165 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

- 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.
- BSAMNT-M4 – 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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance