

# 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

<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

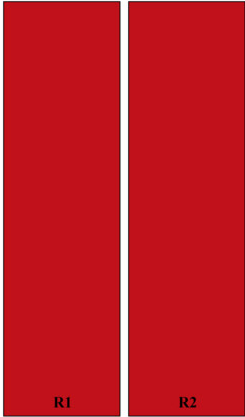
<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	2437 mm   95.945 in

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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

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	617 – 806 MHz
<b>Polarization</b>	±45°

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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)

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## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	382 mm   15.039 in
<b>Length, packed</b>	2590 mm   101.969 in
<b>Weight, gross</b>	79 kg   174.165 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/Exempted



## 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