

FFV4-65B-R6

12-port sector antenna, 4x 617-894 and 8x 1695–2690 MHz, 65° HPBW, 6x RET



Electrical Specifications

Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain, dBi	14.0	14.7	17.2	17.9	18.3	18.4	18.4
Beamwidth, Horizontal, degrees	68	59	64	62	61	56	54
Beamwidth, Vertical, degrees	14.6	12.4	5.6	5.3	5.0	4.4	4.2
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	16	20	20	20	19	21
Front-to-Back Ratio at 180°, dB	29	29	34	34	34	30	27
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	200	200	200	200	200
Polarization	±45°	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm						

Electrical Specifications, BASTA*

Frequency Band, MHz	617–698	698–894	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	13.4	14.2	16.5	17.4	17.8	18.0	18.0
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.6	±1	±0.5	±0.5	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 ° 13.6 8 ° 13.4 14 ° 13.3	2 ° 14.5 8 ° 14.3 14 ° 13.7	2 ° 16.2 7 ° 16.6 12 ° 16.5	2 ° 17.1 7 ° 17.5 12 ° 17.5	2 ° 17.4 7 ° 17.9 12 ° 17.8	2 ° 17.7 7 ° 18.2 12 ° 18.0	2 ° 17.5 7 ° 18.1 12 ° 18.1
Beamwidth, Horizontal Tolerance, degrees	±6.5	±6.6	±6.6	±5.5	±5.4	±7.1	±6.3
Beamwidth, Vertical Tolerance, degrees	±0.9	±1.4	±0.3	±0.3	±0.4	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	18	16	15	18	17	16	16
Front-to-Back Total Power at 180° ± 30°, dB	21	20	27	29	28	24	22
CPR at Boresight, dB	18	17	20	20	20	15	17
CPR at Sector, dB	12	8	10	8	8	5	5

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs](#).

Array Layout

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	617-894	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	617-894	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

Left Bottom Right

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

Port Configuration



General Specifications

Operating Frequency Band

1695 – 2690 MHz | 617 – 894 MHz

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Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Total Input Power, maximum	900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	12
RF Connector Quantity, low band	4
RF Connector Quantity, high band	8
RF Connector Interface	4.3-10 Female
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Aluminum Low loss circuit board
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	685.0 N @ 150 km/h 154.0 lbf @ 150 km/h
Wind Loading, lateral	232.0 N @ 150 km/h 52.2 lbf @ 150 km/h
Wind Loading, maximum	889.0 N @ 150 km/h 199.9 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	1828.0 mm 72.0 in
Width	498.0 mm 19.6 in
Depth	197.0 mm 7.8 in
Net Weight, without mounting kit	37.7 kg 83.1 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Packed Dimensions

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Length	2010.0 mm 79.1 in
Width	608.0 mm 23.9 in
Depth	352.0 mm 13.9 in
Shipping Weight	50.0 kg 110.2 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption

Designed, manufactured and/or distributed under this quality management system

Above Maximum Concentration Value (MCV)



Included Products

BSAMNT-3 — 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