

V65S-C3-1XR



2-port small cell antenna, 2x 1695–2690 MHz, 65° HPBW, 1x RET with manual override.

- Provides a future-ready antenna solution with flexibility to reassign antenna, for example GSM 1800 service to 2.6GHz LTE at a later date
- Employs state-of-the-art ultra wideband technology providing excellent RF performance in all bands
- RF technology flexible—suitable for LTE, UMTS, CDMA, GSM, AWS, WiMAX, and other applications from 1.7–2.7 GHz
- Excellent RF pattern control over the full operating band and tilt range for desired coverage and interference containment
- 4.3-10 connector significantly improves PIM consistency and smaller footprint on antenna bottom

General Specifications

Antenna Type	Small Cell
Band	Single band
Color	Light gray
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	PVC, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	2
RF Connector Quantity, total	2

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male

Dimensions

Width	170 mm 6.693 in
Length	600 mm 23.622 in
Depth	105 mm 4.134 in

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz
Polarization	±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal RET	Low band (1)

Electrical Specifications

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain, dBi	13.4	13.8	13.9	14.4	14.5
Beamwidth, Horizontal, degrees	70	68	69	63	61
Beamwidth, Vertical, degrees	18.5	17.2	16.4	14.4	13.6
Beam Tilt, degrees	0–20	0–20	0–20	0–20	0–20
USLS (First Lobe), dB	15	17	17	17	14
Front-to-Back Ratio at 180°, dB	27	27	28	28	25
Isolation, Cross Polarization, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	300	300	300	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1880	1850–1990	1920–2200	2300–2500	2500–2690
Gain by all Beam Tilts, average, dBi	13.1	13.5	13.5	14.1	14.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.6	±0.6	±0.6	±0.6
Gain by Beam Tilt, average, dBi	0° 13.0 10° 13.2 20° 13.1	0° 13.5 10° 13.5 20° 13.3	0° 13.5 10° 13.5 20° 13.3	0° 14.1 10° 14.2 20° 13.3	0° 14.2 10° 14.2 20° 13.4
Beamwidth, Horizontal	±3.2	±2.7	±3.7	±4	±4.9

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Tolerance, degrees

Beamwidth, Vertical Tolerance, degrees	±1.4	±1.5	±1.2	±1	±1
USLS, beampeak to 20° above beampeak, dB	15	17	17	17	14
Front-to-Back Total Power at 180° ± 30°, dB	24	24	24	25	23
CPR at Boresight, dB	19	20	19	16	15
CPR at Sector, dB	16	15	14	5	7

Mechanical Specifications

Wind Loading at Velocity, frontal	118.0 N @ 150 km/h 26.8 lbf @ 150 km/h
Wind Loading at Velocity, lateral	10.8 lbf @ 150 km/h 48.0 N @ 150 km/h
Wind Speed, maximum	241 km/h 149.75 mph

Packaging and Weights

Width, packed	302 mm 11.89 in
Depth, packed	212 mm 8.346 in
Length, packed	726 mm 28.583 in
Net Weight, without mounting kit	3.8 kg 8.378 lb
Weight, gross	8.9 kg 19.621 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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



Included Products

- DB390 — Pipe Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Use for narrow panel antennas. Includes two pipe mounts.
- DB5098 — Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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