

# 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

<b>Antenna Type</b>	Small Cell
<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
<b>Radome Material</b>	PVC, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	2
<b>RF Connector Quantity, total</b>	2

## 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>	2 W

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<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	170 mm   6.693 in
<b>Depth</b>	105 mm   4.134 in
<b>Length</b>	600 mm   23.622 in
<b>Net Weight, without mounting kit</b>	3.8 kg   8.378 lb

## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain, dBi</b>	13.4	13.8	13.9	14.4	14.5
<b>Beamwidth, Horizontal, degrees</b>	70	68	69	63	61
<b>Beamwidth, Vertical, degrees</b>	18.5	17.2	16.4	14.4	13.6
<b>Beam Tilt, degrees</b>	0–20	0–20	0–20	0–20	0–20
<b>USLS (First Lobe), dB</b>	15	17	17	17	14
<b>Front-to-Back Ratio at 180°, dB</b>	27	27	28	28	25
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port, maximum, watts</b>	300	300	300	250	250

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.1	13.5	13.5	14.1	14.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.6	±0.6	±0.6	±0.6

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<b>Gain by Beam Tilt, average, dBi</b>	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
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.2	±2.7	±3.7	±4.0	±4.9
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.4	±1.5	±1.2	±1	±1
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	17	17	17	14
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	24	24	25	23
<b>CPR at Boresight, dB</b>	19	20	19	16	15
<b>CPR at Sector, dB</b>	16	15	14	5	7

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	118.0 N @ 150 km/h (26.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	48.0 N @ 150 km/h (10.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	151.0 N @ 150 km/h (33.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	302 mm   11.89 in
<b>Depth, packed</b>	212 mm   8.346 in
<b>Length, packed</b>	726 mm   28.583 in
<b>Weight, gross</b>	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



## 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

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\* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance