R2V4PX310R



12-port sector antenna, 4x 698–960 and 8x 1710–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET (Antenna 1 and Antenna 2).

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in "Cascaded SRET" configuration

OBSOLETE

This product was discontinued on: December 31, 2018

Replaced By

RRV4-65D-R6	12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET.
RRV3-65D-R5	10-port sector antenna, 4x 694–960 and 6x 1695–2690 MHz, 65° HPBW, 5x RET

Electrical Specifications

Frequency Band, MHz	**698–790**	**790–890**	**890–960**	**1710–1920**	**1920–2170**	**2300–2690**
Gain, dBi	16.0	16.6	16.9	16.4	17.7	18.4
Beamwidth, Horizontal, degrees	64	62	58	62	60	59
Beamwidth, Vertical, degrees	10.0	8.9	7.9	8.7	7.5	6.1
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	18	17	17	18
Front-to-Back Ratio at 180°, dB	31	32	30	31	33	34
CPR at Boresight, dB	20	23	20	23	20	13
CPR at Sector, dB	12	15	11	13	10	3
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR | Return Loss, dB	1.43 | 15.0	1.43 | 15.0	1.43 | 15.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	300	250	250	250
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

Electrical Specifications, BASTA*

Frequency Band, MHz	**698–790**	**790–890**	**890–960**	**1710–1920**	**1920–2170**	**2300–2690**
Gain by all Beam Tilts, average, dBi	15.6	16.3	16.7	16.1	17.3	18.0
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.3	±0.7	±0.6	±0.6
Gain by Beam Tilt, average, dBi	0 ° | 15.7 5 ° | 15.6 10 ° | 15.6	0 ° | 16.2 5 ° | 16.3 10 ° | 16.3	0 ° | 16.7 5 ° | 16.7 10 ° | 16.7	0 ° | 16.1 5 ° | 16.1 10 ° | 16.1	0 ° | 17.5 5 ° | 17.4 10 ° | 17.1	0 ° | 18.1 5 ° | 17.9 10 ° | 17.8
Beamwidth, Horizontal Tolerance, degrees	±3.4	±2.3	±2.6	±3.4	±2.5	±4.4
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.5	±0.2	±0.7	±0.7	±0.6

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USLS, beampeak to 20° above beampeak, dB	18	18	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	26	27	25	30	31	32
CPR at Boresight, dB	20	24	20	23	20	13
CPR at Sector, dB	12	15	11	14	10	2

* 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.

General Specifications

Operating Frequency Band	1710 – 2690 MHz | 698 – 960 MHz
Antenna Type	Sector
Band	Multiband
Performance Note	Outdoor usage

Mechanical Specifications

RF Connector Quantity, total	12
RF Connector Quantity, low band	4
RF Connector Quantity, high band	8
RF Connector Interface	7-16 DIN Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radome Material	ASA, UV stabilized
RF Connector Location	Bottom
Wind Loading, frontal	2,008.0 N @ 150 km/h | 45.4 lbf @ 150 km/h
Wind Loading, lateral	101.2 lbf @ 150 km/h | 450.0 N @ 150 km/h
Wind Speed, maximum	200 km/h | 124 mph

Dimensions

Length	2490.0 mm | 98.0 in
Width	641.0 mm | 25.2 in
Depth	244.0 mm | 9.6 in
Net Weight, without mounting kit	65.0 kg | 143.3 lb

Remote Electrical Tilt (RET) Information

Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

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RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

Packed Dimensions

Length	2693.0 mm | 106.0 in
Width	739.0 mm | 29.1 in
Depth	400.0 mm | 15.7 in
Shipping Weight	95.0 kg | 209.4 lb

Regulatory Compliance/Certifications

Agency	**Classification**
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)

Included Products

T-029-GL-E — Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

ATCB-B01-C50 — AISG RET Control Cable, 0.5 m

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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