CCV4PX310.11R



12-port sector antenna, 4x 790–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET.

- 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: March 27, 2020

Replaced By:

12P-4L8M-D6	12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET
RRV4-65D-R6	12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind loading 880N @ 150km/h

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

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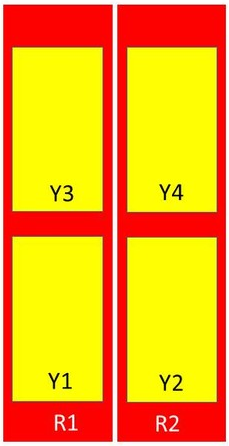
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (4) | Low band (2)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2720 mm | 107.087 in
Net Weight, without mounting kit	54 kg | 119.049 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	790-960	1-2	1	ARxxxxxxxxxxxxxxxx1
R2	790-960	3-4	2	ARxxxxxxxxxxxxxxxx2
Y1	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxx3
Y2	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxx4
Y3	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxx5
Y4	1695-2690	11-12	6	ARxxxxxxxxxxxxxxxx6

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 790 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	**790–862**	**880–960**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2500**	**2500–2690**
Gain, dBi	15.8	16.4	16.7	16.8	17.4	18.1	18.1
Beamwidth, Horizontal, degrees	73	62	63	66.3	67	62	64.1
Beamwidth, Vertical, degrees	8.9	8.1	7.6	7	6.6	5.5	5.2
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10	0–10

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USLS (First Lobe), dB	18	18	18	18	18	18	18
Null Fill, dB	-22	-22	-22	-22	-22	-22	-22
Front-to-Back Ratio at 180°, dB	35	34	33	38	39	39	41
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28
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	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	300	300	250	250	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**790–862**	**880–960**	**1695–1880**	**1850–1990**	**1920–2180**	**2300–2500**	**2500–2690**
Gain by all Beam Tilts, average, dBi	15.5	16.2	16.4	16.4	16.9	17.8	17.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.3	±0.4	±0.5	±0.8	±0.4	±0.4
Gain by Beam Tilt, average, dBi	0 ° | 15.5 5 ° | 15.5 10 ° | 15.6	0 ° | 16.2 5 ° | 16.2 10 ° | 16.1	0 ° | 16.3 5 ° | 16.4 10 ° | 16.4	0 ° | 16.4 5 ° | 16.4 10 ° | 16.4	0 ° | 16.9 5 ° | 16.9 10 ° | 16.9	0 ° | 17.9 5 ° | 17.9 10 ° | 17.6	0 ° | 17.7 5 ° | 17.8 10 ° | 17.7
Beamwidth, Horizontal Tolerance, degrees	±5.7	±4.7	±3.4	±7.3	±4.6	±3.7	±3.7
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.3	±0.5	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	18	18	17	18	18	18	18
Front-to-Back Total Power at 180° ± 30°, dB	23	24	26	30	30	32	32
CPR at Boresight, dB	19	18	20	20	19	17	18
CPR at Sector, dB	11	9	9	10	11	11	12

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,085.0 N @ 150 km/h (243.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	380.0 N @ 150 km/h (85.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,404.0 N @ 150 km/h (315.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	893.0 N @ 150 km/h (200.8 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h | 124.274 mph

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Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	312 mm | 12.283 in
Length, packed	2906 mm | 114.41 in
Weight, gross	78.8 kg | 173.724 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Above maximum concentration value
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
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

Included Products

T-029-GL-E	–	Adjustable Tilt Pipe Mounting Kit for 2.362"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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