

# CCV4PX310.11R-C3

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
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

## 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

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, 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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

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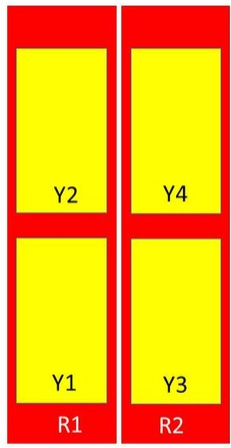
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<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W
<b>Protocol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

## Dimensions

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

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	790-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
R2	790-960	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y1	1695-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3
Y2	1695-2690	7-8	4	ARxxxxxxxxxxxxxxxxx4
Y3	1695-2690	9-10	5	ARxxxxxxxxxxxxxxxxx5
Y4	1695-2690	11-12	6	ARxxxxxxxxxxxxxxxxx6

Left Bottom      Right Bottom

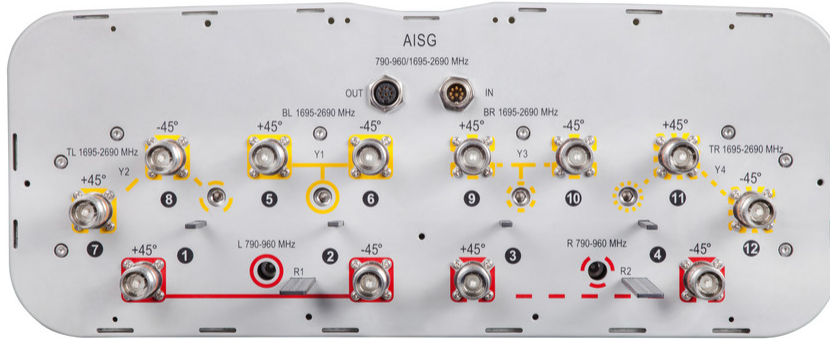
(Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   790 – 960 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	790–862	880–960	1695–1880	1850–1990	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	15.8	16.4	16.7	16.8	17.4	18.1	18.1
<b>Beamwidth, Horizontal, degrees</b>	73	62	63	66.3	67	62	64.1
<b>Beamwidth, Vertical, degrees</b>	8.9	8.1	7.6	7	6.6	5.5	5.2
<b>Beam Tilt, degrees</b>	0–10	0–10	0–10	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	18	18	18	18	18	18	18
<b>Null Fill, dB</b>	-22	-22	-22	-22	-22	-22	-22
<b>Front-to-Back Ratio at 180°, dB</b>	35	34	33	38	39	39	41
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28	28
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28
<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	1.5 14.0	1.5 14.0

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<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port, maximum, watts</b>	300	300	250	250	250	250	250

## Electrical Specifications, BASTA

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

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	1,085.0 N @ 150 km/h (243.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	380.0 N @ 150 km/h (85.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,404.0 N @ 150 km/h (315.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	893.0 N @ 150 km/h (200.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	200 km/h (124 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	312 mm   12.283 in
<b>Length, packed</b>	2906 mm   114.41 in
<b>Weight, gross</b>	78.8 kg   173.724 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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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
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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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