

CV3PX310R1



8-port sector antenna, 2x 790–960 and 6x 1710–2690 MHz, 65° HPBW, 4x RET with manual override.

- 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 31, 2022**

Replaced By:

RV3-65D-R4-V3

8-port sector antenna, 2x 694–960 and 6x 1695–2690 MHz, 65° HPBW, 4x IntRET. Antenna rear wind loading 506N @ 150km/h

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	6
RF Connector Quantity, low band	2
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

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 (3) Low band (1)
Power Consumption, idle state, maximum	2 W

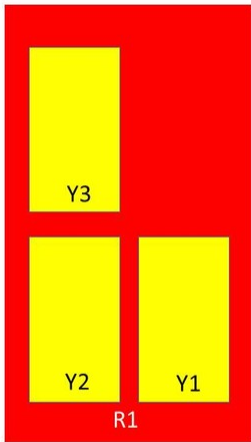
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Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	354 mm 13.937 in
Depth	210 mm 8.268 in
Length	2533 mm 99.724 in
Net Weight, without mounting kit	33 kg 72.752 lb

Array Layout



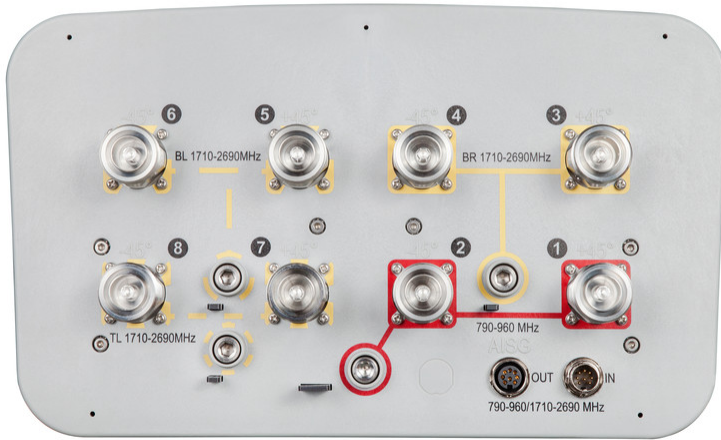
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	790-960	1-2	1	ARxxxxxxxxxxxxxxxxx1
Y1	1710-2690	3-4	2	ARxxxxxxxxxxxxxxxxx2
Y2	1710-2690	5-6	3	ARxxxxxxxxxxxxxxxxx3
Y3	1710-2690	7-8	4	ARxxxxxxxxxxxxxxxxx4

Left Bottom Right

(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	1710 – 2690 MHz 790 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	790–890	890–960	1710–1920	1920–2170	2300–2690
Gain, dBi	16.6	17	16.4	17.1	17.7
Beamwidth, Horizontal, degrees	65	64	61	60	63
Beamwidth, Vertical, degrees	8.9	8.1	8.3	7.4	5.9
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	19	16	16	15
Front-to-Back Ratio at 180°, dB	25	28	29	30	30
CPR at Boresight, dB	17	14	17	15	13
CPR at Sector, dB	9	9	7	7	7
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30

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VSWR Return loss, dB	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
Input Power per Port, maximum, watts	300	300	250	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	790–890	890–960	1710–1920	1920–2170	2300–2690
Gain by all Beam Tilts, average, dBi	16.4	16.8	16.2	16.8	17.3
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.2	±0.3	±0.6	±0.5
Gain by Beam Tilt, average, dBi	0° 16.4 5° 16.4 10° 16.5	0° 16.8 5° 16.8 10° 16.7	0° 16.3 5° 16.2 10° 16.2	0° 16.8 5° 16.8 10° 16.9	0° 17.6 5° 17.4 10° 17.1
Beamwidth, Horizontal Tolerance, degrees	±1.8	±1.5	±2.6	±2.7	±5
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.2	±0.6	±0.6	±0.6
USLS, beampeak to 20° above beampeak, dB	18	18	18	18	17
Front-to-Back Total Power at 180° ± 30°, dB	24	27	23	25	27
CPR at Boresight, dB	18	15	19	18	17
CPR at Sector, dB	8	9	7	4	7

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,237.0 N @ 150 km/h (278.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	478.0 N @ 150 km/h (107.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,271.0 N @ 150 km/h (285.7 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	420 mm 16.535 in
Depth, packed	320 mm 12.598 in
Length, packed	2720 mm 107.087 in
Weight, gross	50 kg 110.231 lb

Regulatory Compliance/Certifications

Agency	Classification
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CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below 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
UK-ROHS	Compliant



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