RVV-45A-R3

6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 45° HPBW, 3x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

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 | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

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	Low band (1) | Mid band (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

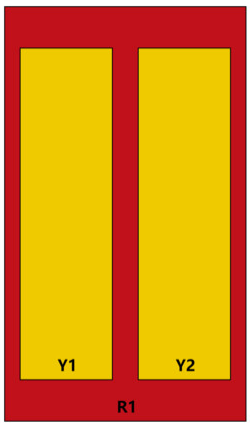
Dimensions

Width	457 mm | 17.992 in
Depth	178 mm | 7.008 in
Length	1399 mm | 55.079 in

RVV-45A-R3

Net Weight, antenna only	26.1 kg | 57.541 lb

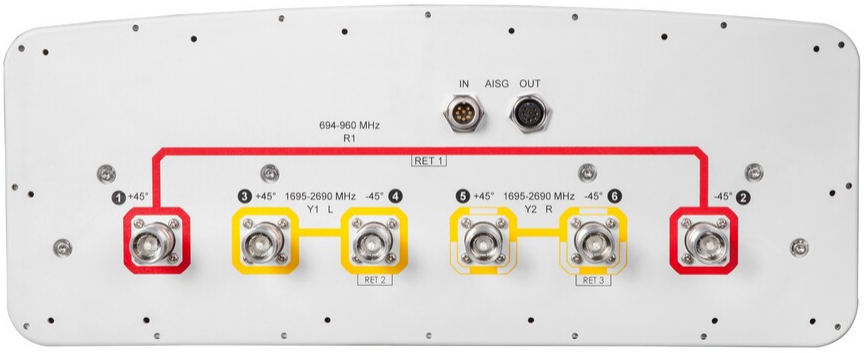
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	ANxxxxxxxxxxxxx1.1
Y1	1695-2690	3 - 4	2	AISG1	ANxxxxxxxxxxxxx1.2
Y2	1695-2690	5 - 6	3	AISG1	ANxxxxxxxxxxxxx1.3

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°

RVV-45A-R3

Total Input Power, maximum	550 W @ 50 °C
BASTA Version, electrical	BASTA v12

Electrical Specifications

	R1	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	**694–790**	**790–890**	**890–960**	**1695–1920**	**1920–2180**	**2300–2690**
RF Port	1,2	1,2	1,2	3-6	3-6	3-6
Gain, dBi	15.5	16.1	16.5	18.8	19.3	19.6
Beamwidth, Horizontal, degrees	47	44	40	45	40	34
Beamwidth, Vertical, degrees	17.4	15.6	14.5	6.9	6.3	5.4
Beam Tilt, degrees	2–18	2–18	2–18	2–12	2–12	2–12
USLS (First Lobe), dB	20	20	17	14	15	16
Front-to-Back Ratio at 180°, dB	30	32	31	37	36	36
Front-to-Back Total Power at 180° ± 30°, dB	22	21	22	28	29	26
CPR at Boresight, dB	20	18	20	17	20	18
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	159.0 N @ 150 km/h (35.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	692.0 N @ 150 km/h (155.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	608 mm | 23.937 in
Depth, packed	346 mm | 13.622 in

RVV-45A-R3

Length, packed	1542 mm | 60.709 in
Weight, gross	41.1 kg | 90.61 lb

Regulatory Compliance/Certifications

Agency	Classification
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.andrew.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

Included Products

BSAMNT-3	–	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance