RR-85D-R2N43

4-port sector antenna, 4x 694–960 MHz, 85° HPBW, 2x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Antenna shape optimized for wind load reduction

General Specifications

Antenna Type	Sector
Band	Single band
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, low band	4
RF Connector Quantity, total	4

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
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 (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	430 mm | 16.929 in
Depth	197 mm | 7.756 in
Length	2769 mm | 109.016 in

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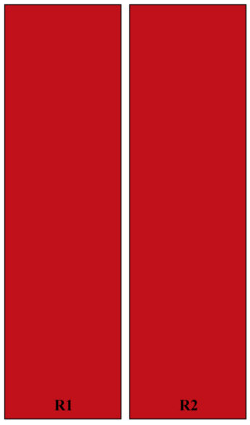
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2

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

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	600 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**698–806**	**790–862**	**824–894**	**880–960**
Gain, dBi	15.6	16.2	16.4	16.7
Beamwidth, Horizontal, degrees	89	81	81	77
Beamwidth, Vertical, degrees	8.3	7.7	7.4	7
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	19	19	18
Front-to-Back Ratio at 180°, dB	30	33	33	28
Isolation, Cross Polarization, dB	27	27	27	27
Isolation, Inter-band, dB	27	27	27	27
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**790–862**	**824–894**	**880–960**

Gain by all Beam Tilts, average, dBi	15.3	15.9	16.2	16.4
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.4	±0.4	±0.3
Beamwidth, Horizontal Tolerance, degrees	±10.1	±4.4	±3.5	±5.5
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	14	14	16	16
Front-to-Back Total Power at 180° ± 30°, dB	23	24	25	24
CPR at Boresight, dB	25	26	26	25
CPR at Sector, dB	13	12	13	13

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,023.0 N @ 150 km/h (230.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm | 20.866 in
Depth, packed	356 mm | 14.016 in
Length, packed	2897 mm | 114.055 in
Weight, gross	54.7 kg | 120.593 lb
Weight, net	34.7 kg | 76.5 lb

Regulatory Compliance/Certifications

Agency	Classification
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

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Included Products

BSAMNT-4	–	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.
BSAMNT-M4	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance