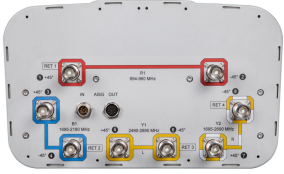


RHTV65A-FH-C3-4XR



8-port sector antenna, 2x 694–960, 2x 1695–2180, 2x 2490–2690 and 2x 1695–2690 MHz, 65° HPBW, 4x RET. High bands (H1 and H2) arrays are diplexed at the element level.

- 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: November 30, 2023

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
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 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
Power Consumption, normal conditions, maximum	13 W
Protocol	3GPP/AISG 2.0 (Single RET)

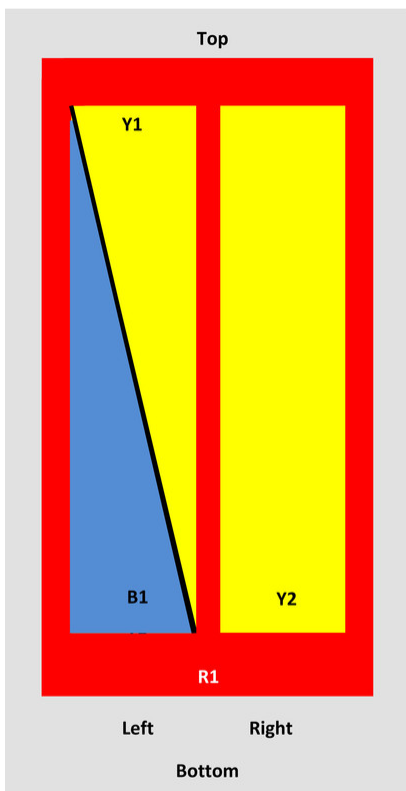
RHTV65A-FH-C3-4XR

Dimensions

Width	350 mm 13.78 in
Depth	208 mm 8.189 in
Length	1400 mm 55.118 in
Net Weight, without mounting kit	19.9 kg 43.872 lb

Array Layout

RHTV65A-FH-C3-4XR



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	ANXXXXXXXXXXXXX1
B1	1695-2180	3-4	2	ANXXXXXXXXXXXXX2
Y1	2490-2690	5-6	3	ANXXXXXXXXXXXXX3
Y2	1695-2690	7-8	4	ANXXXXXXXXXXXXX4

View from the front of the antenna
(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2180 MHz 1695 – 2690 MHz 2490 – 2690 MHz 694 – 960 MHz

RHTV65A-FH-C3-4XR

Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

	LB	LB	HB1	HB1	HB2	HB3	HB3	HB3
Frequency Band, MHz	694–862	880–960	1695–1920	1920–2180	2490–2690	1695–1920	1920–2200	2300–2690
Gain, dBi	14.1	14.6	16.8	17	17.2	17.3	17.8	18.1
Beamwidth, Horizontal, degrees	68	63	62	62	65	62	62	65
Beamwidth, Vertical, degrees	16.2	14.2	7.4	6.6	5.3	7.4	6.6	5.6
Beam Tilt, degrees	3–18	3–18	3–13	3–13	3–13	3–13	3–13	3–13
USLS (First Lobe), dB	16	18	20	19	15	18	18	18
Front-to-Back Ratio at 180°, dB	31	30	31	35	36	31	37	37
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30	30	30
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	200	250	250	200

Electrical Specifications, BASTA

	694–862	880–960	1695–1920	1920–2180	2490–2690	1695–1920	1920–2200	2300–2690
Frequency Band, MHz	694–862	880–960	1695–1920	1920–2180	2490–2690	1695–1920	1920–2200	2300–2690
Gain by all Beam Tilts, average, dBi	13.9	14.3	16.4	16.8	16.8	16.9	17.5	17.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.5	±0.4	±0.6	±0.6	±0.5	±0.6
Gain by Beam Tilt, average, dBi	3° 14.0 10° 13.9 18° 13.6	3° 14.7 10° 14.4 18° 13.8	3° 16.3 8° 16.5 13° 16.2	3° 16.5 8° 16.9 13° 16.7	3° 16.4 8° 17.0 13° 16.4	3° 16.6 8° 17.0 13° 16.7	3° 17.1 8° 17.7 13° 17.3	3° 17.5 8° 18.0 13° 17.4
Beamwidth, Horizontal Tolerance, degrees	±2.6	±2.9	±3.9	±2.2	±2.7	±4.1	±3	±3.4
Beamwidth, Vertical Tolerance, degrees	±1.4	±1.1	±0.5	±0.4	±0.3	±0.5	±0.6	±0.4
USLS, beampeak to 20° above beampeak, dB	17	17	12	13	11	14	17	13
Front-to-Back Total Power at 180° ± 30°, dB	24	23	27	27	27	26	28	29

RHTV65A-FH-C3-4XR

CPR at Boresight, dB	18	22	18	22	17	21	21	20
CPR at Sector, dB	10	10	11	9	9	10	9	9

Mechanical Specifications

Wind Loading @ Velocity, frontal	221.0 N @ 150 km/h (49.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	185.0 N @ 150 km/h (41.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	469.0 N @ 150 km/h (105.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	234.0 N @ 150 km/h (52.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	456 mm 17.953 in
Depth, packed	357 mm 14.055 in
Length, packed	1544 mm 60.787 in
Weight, gross	33.5 kg 73.855 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
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