RV4-65D-M-V2



10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, AccuRET capable

OBSOLETE

This product was discontinued on: November 30, 2023 Replaced By:

RV4-65B-R5-V2 10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET

General Specifications

Antenna Type Sector

Band Multiband

Grounding TypeRF 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 MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 8
RF Connector Quantity, low band 2
RF Connector Quantity, total 10

Dimensions

 Width
 350 mm | 13.78 in

 Depth
 208 mm | 8.189 in

 Length
 2688 mm | 105.827 in

 Net Weight, without mounting kit
 31 kg | 68.343 lb

Electrical Specifications

COMMSC PE®

RV4-65D-M-V2

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

Total Input Power, maximum 800 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694-790	790-890	890-960	1695-1880	1920-2200	2300-2500	2500-2690
Gain, dBi	16.6	17.2	17.4	16.8	17.5	18.1	18
Beamwidth, Horizontal, degrees	67	65	63	62	62	62	62
Beamwidth, Vertical, degrees	8.2	7.4	6.8	7.5	6.5	5.7	5.4
Beam Tilt, degrees	0-10	0-10	0-10	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	19	24	22	15	16	15	15
Front-to-Back Ratio at 180°, dB	32	35	38	31	35	37	36
Isolation, Cross Polarization, dB	28	28	28	28	28	28	28
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250		200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1695-1880	1920-2200	2300-2500	2500-2690
Gain by all Beam Tilts, average, dBi	16.4	16.9	17.2	16.3	17.1	17.7	17.6
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.2	±0.7	±0.6	±0.6	±0.6
Gain by Beam Tilt, average, dBi	0° 16.2 5° 16.5 10° 16.5	0° 16.6 5° 17.0 10° 16.9	0 ° 17.0 5 ° 17.4 10 ° 17.2	2° 16.2 7° 16.4 12° 16.2	2° 16.8 7° 17.2 12° 17.0	2° 17.3 7° 17.8 12° 17.7	2° 17.3 7° 17.7 12° 17.4
Beamwidth, Horizontal Tolerance, degrees	±1.1	±1.5	±1.4	±3.4	±2.1	±3.5	±3.5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.4	±0.3	±0.5	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	16	16	17	13	14	14	13
Front-to-Back Total Power at	26	25	25	27	28	28	28

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180° ± 30°, dB							
CPR at Boresight, dB	17	20	20	18	21	19	17
CPR at Sector, dB	11	10	10	10	11	8	7

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 460 mm | 18.11 in

 Depth, packed
 350 mm | 13.78 in

 Length, packed
 2830 mm | 111.417 in

 Weight, gross
 47.5 kg | 104.719 lb

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



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 NoteSevere environmental conditions may degrade optimum performance

