

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

OBSOLETE

This product was discontinued on: March 31, 2021

Replaced By:

RV4-65D-M-V2 10-port sector antenna, 2x 694-960 and 8x 1695-2690 MHz, 65° HPBW, AccuRET capable

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 7-16 DIN Female

RF Connector Location Bottom

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

Remote Electrical Tilt (RET) Information

Model with Factory Installed AISG 2.0 Actuator RV4-65D-ER5

Dimensions

COMMSCOPE®

RV4-65D-M

 Width
 350 mm
 | 13.78 in

 Depth
 208 mm
 | 8.189 in

Length 2688 mm | 105.827 in

Net Weight, without mounting kit 32 kg | 70.548 lb

Electrical Specifications

Impedance 50 ohm

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

Polarization ±45°

Total Input Power, maximum $800~\mathrm{W} \ @ \ 50~\mathrm{^{\circ}C}$

Electrical Specifications

Frequency Band, MHz	694-790	790-890	890-960	1695-1920	1920-2200	2300-2500	2500-2690
Gain, dBi	16.6	17.1	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	200

Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1695-1920	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

Page 2 of 4

RV4-65D-M

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 180° ± 30°, dB	26	25	25	27	28	28	28
CPR at Boresight, dB	17	20	20	18	21	19	17
CPR at Sector, dB	11	10	10	10	10	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
 48.5 kg | 106.924 lb

Regulatory Compliance/Certifications

AgencyClassificationCHINA-ROHSBelow maximum concentration valueISO 9001:2015Designed, manufactured and/or distributed under this quality management systemREACH-SVHCCompliant as per SVHC revision on www.commscope.com/ProductComplianceROHSCompliantUK-ROHSCompliant



Included Products

BSAMNT-3 – Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.

Page 3 of 4

RV4-65D-M

Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

