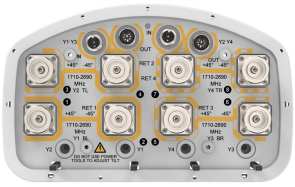
V4-65D-R4-V2



8-port sector antenna, 8x 1710–2690 MHz, 65° HPBW, 4x RET with manual override. Antenna rear wind loading 445N @ 150km/h

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- Employs state-of-the-art ultra wideband technology providing excellent RF performance in all bands
- Wind Loading; Frontal / Lateral / Rear – 439 / 372 / 445 N @ 150km/h

OBSOLETE

This product was discontinued on: November 30, 2023

Replaced By:

8P-8M-A4 V4-65A-R4	8-port sector antenna, 8x 1695–2690 MHz, 65° HPBW, 4x RET

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 | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Low 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, total	8

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

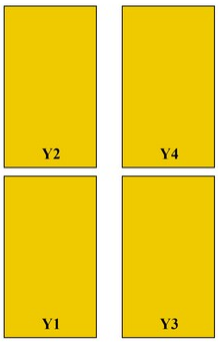
V4-65D-R4-V2

Input Voltage	10–30 Vdc
Internal RET	High band (4)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	301 mm | 11.85 in
Depth	180 mm | 7.087 in
Length	2675 mm | 105.315 in
Net Weight, without mounting kit	29.5 kg | 65.036 lb

Array Layout

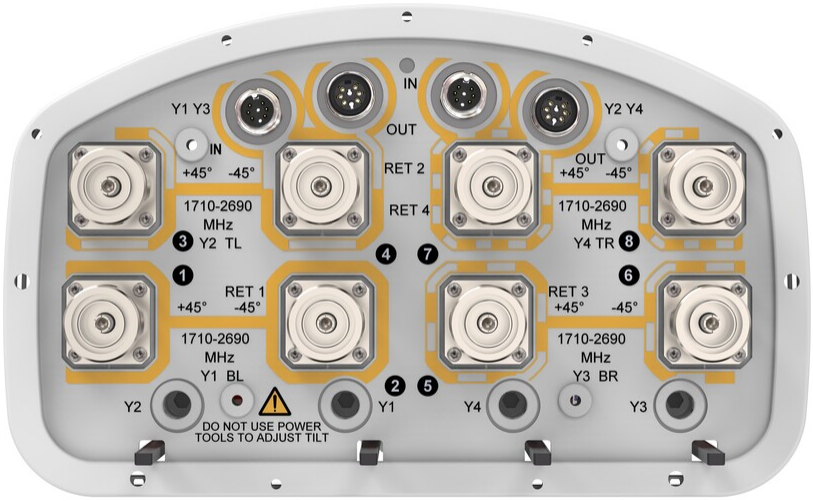


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
Y1	1710-2690	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1710-2690	3 - 4	2	AISG2	CPxxxxxxxxxxxxxxY2
Y3	1710-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1710-2690	7 - 8	4	AISG2	CPxxxxxxxxxxxxxxY4

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

Port Configuration

V4-65D-R4-V2



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**1710–1880**	**1920–2200**	**2300–2500**	**2500–2690**
Gain, dBi	16.9	17.8	18.3	18.9
Beamwidth, Horizontal, degrees	70	67	60	54
Beamwidth, Vertical, degrees	6.9	6.3	5.5	5.2
Beam Tilt, degrees	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	16	17	20	20
Front-to-Back Ratio at 180°, dB	35	37	40	39
Isolation, Cross Polarization, dB	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28
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	-150	-150	-150	-150

Input Power per Port at 50°C, maximum, watts	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**1710–1880**	**1920–2200**	**2300–2500**	**2500–2690**
Gain by all Beam Tilts, average, dBi	16.8	17.4	18.1	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.4	±0.6
Gain by Beam Tilt, average, dBi	0 ° | 16.6 5 ° | 16.8 10 ° | 16.8	0 ° | 17.3 5 ° | 17.5 10 ° | 17.3	0 ° | 17.8 5 ° | 18.1 10 ° | 18.1	0 ° | 18.4 5 ° | 18.7 10 ° | 18.2
Beamwidth, Horizontal Tolerance, degrees	±2.7	±3	±4.1	±2.8
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.6	±0.4	±0.4
USLS, beampeak to 20° above beampeak, dB	15	15	18	18
Front-to-Back Total Power at 180° ± 30°, dB	25	27	28	27
CPR at Boresight, dB	15	16	16	15
CPR at Sector, dB	12	12	6	5

Mechanical Specifications

Wind Loading @ Velocity, frontal	439.0 N @ 150 km/h (98.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	372.0 N @ 150 km/h (83.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	845.0 N @ 150 km/h (190.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	445.0 N @ 150 km/h (100.0 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	409 mm | 16.102 in
Depth, packed	309 mm | 12.165 in
Length, packed	2924 mm | 115.118 in
Weight, gross	48 kg | 105.822 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

V4-65D-R4-V2

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.
BSAMNT-M	–	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