

12-port sector antenna, 4x 790–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET.

- Integrated Internal Remote Electrical Tilt (RET), with independent control of electrical tilt with manual override on all arrays
- All Internal RET actuators are connected in "Cascaded SRET" configuration

OBSOLETE

This product was discontinued on: March 27, 2020

Replaced By:

12P-4L8M-D6 12-port sector antenna, 4x 694-960 and 8x 1695-2690 MHz, 65° HPBW, 6x RET

RRV4-65D-R6 12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind

loading 880N @ 150km/h

General Specifications

Antenna Type Sector

Band Multiband

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 7-16 DIN Female

RF Connector LocationBottom

RF Connector Quantity, high band 8
RF Connector Quantity, low band 4
RF Connector Quantity, total 12

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 (4) | Low band (2)

 ${\bf Power \ Consumption, \ idle \ state, \ maximum} \qquad \qquad 2 \ {\bf W}$

Power Consumption, normal conditions, maximum 13 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

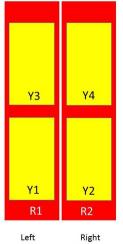
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2720 mm | 107.087 in

 Net Weight, without mounting kit
 54 kg | 119.049 lb

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|---------------|-----------------------|
| R1 | 790-960 | 1-2 | 1 | ARxxxxxxxxxxxxxxxxxx1 |
| R2 | 790-960 | 3-4 | 2 | ARxxxxxxxxxxxxxxx2 |
| Y1 | 1695-2690 | 5-6 | 3 | ARxxxxxxxxxxxxxx3 |
| Y2 | 1695-2690 | 7-8 | 4 | ARxxxxxxxxxxxxx4 |
| Y3 | 1695-2690 | 9-10 | 5 | ARxxxxxxxxxxxxxxx |
| Y4 | 1695-2690 | 11-12 | 6 | ARxxxxxxxxxxxxxx6 |

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

Port Configuration

Bottom







Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2690 MHz | 790 – 960 MHz

Polarization ±45°

Electrical Specifications

| Frequency Band, MHz | 790-862 | 880-960 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2500 | 2500-2690 |
|------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 15.8 | 16.4 | 16.7 | 16.8 | 17.4 | 18.1 | 18.1 |
| Beamwidth, Horizontal, degrees | 73 | 62 | 63 | 66.3 | 67 | 62 | 64.1 |
| Beamwidth, Vertical, degrees | 8.9 | 8.1 | 7.6 | 7 | 6.6 | 5.5 | 5.2 |
| Beam Tilt, degrees | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 |
| USLS (First Lobe), dB | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| Null Fill, dB | -22 | -22 | -22 | -22 | -22 | -22 | -22 |
| Front-to-Back Ratio at 180°, dB | 35 | 34 | 33 | 38 | 39 | 39 | 41 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| 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 |

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| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
|-------------------------------|------|------|------|------|------|------|------|
| Input Power per Port, | 300 | 300 | 250 | 250 | 250 | 250 | 250 |
| maximum, watts | | | | | | | |

Electrical Specifications, BASTA

| Frequency Band, MHz | 790-862 | 880-960 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2500 | 2500-2690 |
|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 15.5 | 16.2 | 16.4 | 16.4 | 16.9 | 17.8 | 17.8 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.3 | ±0.4 | ±0.5 | ±0.8 | ±0.4 | ±0.4 |
| Gain by Beam Tilt, average, dBi | 0° 15.5 5° 15.5 10° 15.6 | 0° 16.2 5° 16.2 10° 16.1 | 0° 16.3 5° 16.4 10° 16.4 | 0° 16.4 5° 16.4 10° 16.4 | 0° 16.9 5° 16.9 10° 16.9 | 0° 17.9 5° 17.9 10° 17.6 | 0° 17.7 5° 17.8 10° 17.7 |
| Beamwidth, Horizontal Tolerance, degrees | ±5.7 | ±4.7 | ±3.4 | ±7.3 | ±4.6 | ±3.7 | ±3.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.3 | ±0.5 | ±0.3 | ±0.5 | ±0.3 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 18 | 17 | 18 | 18 | 18 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 24 | 26 | 30 | 30 | 32 | 32 |
| CPR at Boresight, dB | 19 | 18 | 20 | 20 | 19 | 17 | 18 |
| CPR at Sector, dB | 11 | 9 | 9 | 10 | 11 | 11 | 12 |

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 1,085.0 N @ 150 km/h (243.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 380.0 N @ 150 km/h (85.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,404.0 N @ 150 km/h (315.6 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 893.0 N @ 150 km/h (200.8 lbf @ 150 km/h)

 Wind Speed, maximum
 200 km/h (124 mph)

Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 312 mm | 12.283 in

 Length, packed
 2906 mm | 114.41 in

 Weight, gross
 78.8 kg | 173.724 lb

Regulatory Compliance/Certifications

Agency Classification

COMMSCOPE®

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



Included Products

T-029-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.362"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance



T-029-GL-F



Adjustable Tilt Pipe Mounting Kit for 2.362"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

Product Classification

Product Type Adjustable tilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

Dimensions

Compatible Length, maximum2850 mm | 112.205 inCompatible Length, minimum1500 mm | 59.055 inCompatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inAntenna-to-Pipe Distance85 mm | 3.346 inBracket-to-Bracket Distance1400 mm | 55.118 inWeight, net6 kg | 13.228 lb

Material Specifications

Material Type Galvanized steel

Mechanical Specifications

Mechanical Tilt $0^{\circ}-8^{\circ}$

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

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