

12-port sector antenna, 4x 698–960 and 8x 1710–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET (Antenna 1 and Antenna 2).

OBSOLETE

This product was discontinued on: March 31, 2022

Replaced By:

RRV4-65A-R6 12-port sector antenna, 4x 694-960 and 8x 1695-2690 MHz, 65° HPBW, 6x RET

General Specifications

Antenna Type Sector

Band Multiband

Grounding TypeRF connector inner conductor and body grounded to reflector and

mounting bracket

Performance NoteOutdoor usageRadome MaterialASA, UV stabilized

Radiator Material Brass | 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 2 female | 2 male

Input Voltage 10-30 Vdc

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Internal RET High band (4) | Low band (2)

Power Consumption, idle state, maximum 2 W

Power Consumption, normal conditions, maximum 13 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

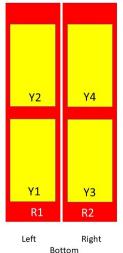
 Width
 641 mm | 25.236 in

 Depth
 244 mm | 9.606 in

 Length
 1607 mm | 63.268 in

 Net Weight, without mounting kit
 49 kg | 108.026 lb

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|---------------|--------------------|
| R1 | 698-960 | 1-2 | 1 | CPxxxxxxxxxxxxxR1 |
| R2 | 698-960 | 3-4 | 2 | CPxxxxxxxxxxxxxxR2 |
| Y1 | 1710-2690 | 5-6 | 3 | CPxxxxxxxxxxxxXY1 |
| Y2 | 1710-2690 | 7-8 | 4 | CPxxxxxxxxxxxxXY2 |
| Y3 | 1710-2690 | 9-10 | 5 | CPxxxxxxxxxxxxXY3 |
| Y4 | 1710-2690 | 11-12 | 6 | CPxxxxxxxxxxxx4 |

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

Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1710 – 2690 MHz | 698 – 960 MHz

Polarization ±45°

Electrical Specifications

| Frequency Band, MHz | 698-790 | 790-890 | 890-960 | 1710-1920 | 1920-2170 | 2300-2690 |
|------------------------|---------|---------|---------|-----------|-----------|-----------|
| Gain, dBi | 14.2 | 14.8 | 15.1 | 15.1 | 16.4 | 16.9 |
| Beamwidth, Horizontal, | 65 | 63 | 60 | 62 | 57 | 58 |

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| degrees | | | | | | |
|--------------------------------------|-------------|-------------|-------------|------------|------------|------------|
| Beamwidth, Vertical, degrees | 16.3 | 14.5 | 13.3 | 13.7 | 12.1 | 9.9 |
| Beam Tilt, degrees | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 |
| USLS (First Lobe), dB | 18 | 18 | 18 | 18 | 18 | 18 |
| Front-to-Back Ratio at 180°, dB | 32 | 31 | 29 | 29 | 32 | 32 |
| CPR at Boresight, dB | 23 | 16 | 15 | 22 | 21 | 14 |
| CPR at Sector, dB | 15 | 13 | 11 | 11 | 10 | 3 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 30 | 30 | 30 | 30 | 30 | 30 |
| VSWR Return loss, dB | 1.43 15.0 | 1.43 15.0 | 1.43 15.0 | 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 |
| Input Power per Port, maximum, watts | 300 | 300 | 300 | 250 | 250 | 250 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698-790 | 790-890 | 890-960 | 1710-1920 | 1920-2170 | 2300-2690 |
|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 13.8 | 14.4 | 14.8 | 14.9 | 15.9 | 16.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.3 | ±0.2 | ±0.7 | ±0.4 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 0° 13.8 5° 13.8 10° 13.8 | 0° 14.4 5° 14.4 10° 14.4 | 0° 14.8 5° 14.8 10° 14.8 | 0° 15.0 5° 14.9 10° 14.8 | 0° 16.0 5° 15.9 10° 15.6 | 0° 16.6 5° 16.6 10° 16.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±2.3 | ±2.3 | ±2.4 | ±5 | ±2.6 | ±5.3 |
| Beamwidth, Vertical Tolerance, degrees | ±1 | ±0.8 | ±0.4 | ±1 | ±1 | ±0.9 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 18 | 18 | 18 | 18 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 26 | 24 | 29 | 31 | 31 |
| CPR at Boresight, dB | 22 | 16 | 15 | 22 | 21 | 14 |
| CPR at Sector, dB | 15 | 12 | 11 | 11 | 10 | 3 |

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 1,296.0 N @ 150 km/h (291.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 274.0 N @ 150 km/h (61.6 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 1,367.0 N @ 150 km/h (307.3 lbf @ 150 km/h)

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Wind Speed, maximum 250 km/h (155 mph)

Packaging and Weights

 Width, packed
 739 mm | 29.095 in

 Depth, packed
 347 mm | 13.661 in

 Length, packed
 1810 mm | 71.26 in

 Weight, gross
 73 kg | 160.937 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
REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



Included Products

ATCB-B01-C50 – AISG RET Control Cable, 0.5 m

T-041-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance NoteSevere environmental conditions may degrade optimum performance



ATCB-B01-C50



AISG RET Control Cable, 0.5 m

- Feeds data and power to RET system components
- AISG and RoHS compliant

Product Classification

Product Type AISG standard cable

General Specifications

AISG Connector A 8-pin DIN Female

AISG Connector A Body Style Straight

AISG Connector A Standard IEC 60130-9

AISG Connector B 8-pin DIN Male

AISG Connector B Body Style Straight

AISG Connector B Standard IEC 60130-9

Color Black

Data Conductor Type 0.24 mm² (24 AWG) twisted pair

EU Certification CB | CE

Power Conductor Type 0.82 mm² (18 AWG) stranded

Total Conductors, quantity 6

Dimensions

 Length
 0.5 m | 1.64 ft

 Diameter Over Jacket
 8 mm | 0.315 in

Electrical Specifications

Protocol AISG 1.1 | AISG 2.0

Voltage, maximum 300 V

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

Relative Humidity Up to 100%

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ATCB-B01-C50

Climatic Sequence Test Method IEC 60068-2-14

Cold Exposure Test Method IEC 60068-2-1

Damp Heat Exposure Test Method IEC 60068-2-30, Test Condition Db

Heat Exposure Test Method IEC 60068-2-2

Ingress Protection Test Method IEC 60529:2001, IP67

Rain Simulation Test Method IEC 60068-2-18, Test Condition Ra, Method 1

UV Resistance Test Method IEC 60068-2-5, Test Condition B

Packaging and Weights

Weight, net 0.1 kg | 0.22 lb

Regulatory Compliance/Certifications

Agency Classification

CE Compliant with the relevant CE product directives

CHINA-ROHS Below maximum concentration value

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

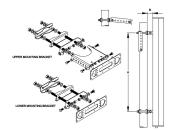
REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





T-041-GL-E



Adjustable Tilt Pipe Mounting Kit for 2.0"-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, maximum1500 mm | 59.055 inCompatible Length, minimum1200 mm | 47.244 inCompatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inAntenna-to-Pipe Distance85 mm | 3.346 inBracket-to-Bracket Distance976 mm | 38.425 inWeight, net5.5 kg | 12.125 lb

Material Specifications

Material Type Galvanized steel

Mechanical Specifications

Mechanical Tilt 0°-12° in steps of 2°

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

Agency Classification

CE Compliant with the relevant CE product directives

COMMSCOPE®

T-041-GL-E

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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 UK-ROHS Compliant



