

RRV42H-6533D-R8



16-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz 65° HPBW and 4x 1695–2400 MHz 2x 33° HPBW, 8x RET.

- All Internal RET actuators are connected in “Cascaded SRET” configuration

General Specifications

| | |
|---|--|
| Antenna Type | Multibeam |
| Band | Multiband |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Performance Note | Outdoor usage |
| 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 | 12 |
| RF Connector Quantity, mid band | 0 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 16 |

Remote Electrical Tilt (RET) Information

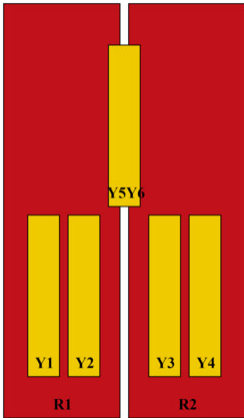
| | |
|--|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (6) Low band (2) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

RRV42H-6533D-R8

| | |
|---|----------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2688 mm 105.827 in |
| Net Weight, without mounting kit | 53.6 kg 118.168 lb |

Array Layout

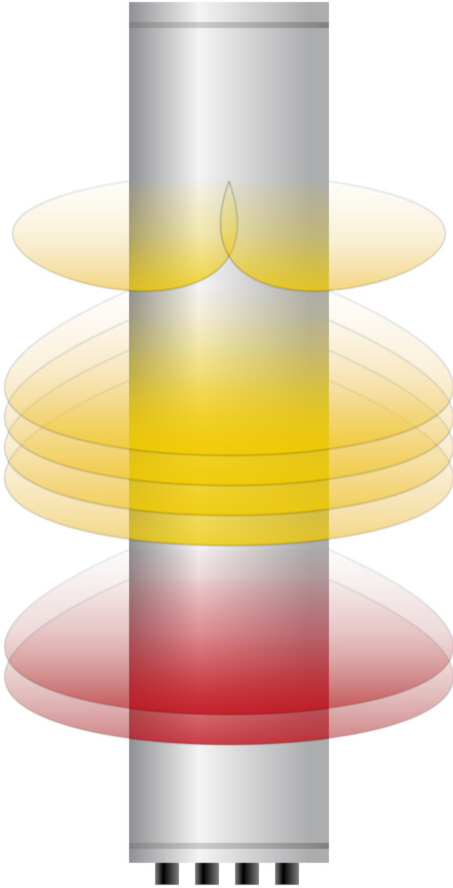


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|---------------|----------|----------------------|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 9 - 10 | 5 | AISG1 | CPxxxxxxxxxxxxxxxxY3 |
| Y4 | 1695-2690 | 11 - 12 | 6 | AISG1 | CPxxxxxxxxxxxxxxxxY4 |
| Y5 | 1695-2400 | 13 - 14 | 7 | AISG1 | CPxxxxxxxxxxxxxxxxY5 |
| Y6 | 1695-2400 | 15 - 16 | 8 | AISG1 | CPxxxxxxxxxxxxxxxxY6 |

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

Beams Configuration

RRV42H-6533D-R8



Port Configuration

RRV42H-6533D-R8



Electrical Specifications

| | |
|-----------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2400 MHz 1695 – 2690 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| | R1-R2 | R1-R2 | Y1-Y4 | Y1-Y4 | Y1-Y4 | Y5-Y6 | Y5-Y6 | Y5-Y6 |
|--|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Frequency Band, MHz | 694-790 | 790-960 | 1695-1920 | 1920-2180 | 2300-2690 | 1695-1880 | 1920-2180 | 2300-2400 |
| Gain, dBi | 15.9 | 16.6 | 16.5 | 17.8 | 18.4 | 17.9 | 19.4 | 19.3 |
| Beam Centers, Horizontal, degrees | | | | | | ±27 | ±27 | ±27 |
| Beamwidth, Horizontal, degrees | 70 | 62 | 68 | 62 | 58 | 32 | 31 | 30 |
| Beamwidth, Vertical, degrees | 9 | 7.7 | 7.4 | 6.5 | 5.5 | 7.4 | 6.5 | 5.7 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 19 | 19 | 18 | 19 | 24 | 19 | 21 | 22 |
| Front-to-Back Ratio at 180°, dB | 31 | 30 | 33 | 32 | 31 | 32 | 36 | 32 |
| Isolation, Cross Polarization, | 28 | 28 | 25 | 25 | 25 | 25 | 25 | 25 |

RRV42H-6533D-R8

dB

| | | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| Isolation, Inter-band, dB | 28 | 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 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 200 | 200 | 200 | 200 | 200 | 200 |

Mechanical Specifications

| | |
|---|---|
| Mechanical Tilt Range | 0°–12° |
| Wind Loading @ Velocity, frontal | 1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 375.0 N @ 150 km/h (84.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 880.0 N @ 150 km/h (197.8 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|----------------------|
| Width, packed | 565 mm 22.244 in |
| Depth, packed | 309 mm 12.165 in |
| Length, packed | 2935 mm 115.551 in |
| Weight, gross | 74.6 kg 164.465 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|-----------------------------------|
| CHINA-ROHS | Below maximum concentration value |
| ROHS | Compliant |
| UK-ROHS | Compliant |



Included Products

- | | | |
|-----------|---|--|
| BSAMNT-4 | – | 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-M4 | – | 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

RRV42H-6533D-R8

Performance Note

Severe environmental conditions may degrade optimum performance



BSAMNT-4



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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 6.5 kg | 14.33 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| 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.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



BSAMNT-M4



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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 4.6 kg | 10.141 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| 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.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

