

# FF-65C-R1



4-port sector antenna, 4x 617–806 MHz, 65° HPBW, 1x RET, 600MHz-Ready Antenna Technology

- Supports up to 10° of Mechanical Down Tilt

## General Specifications

|  |  |
|--|--|
| <b>Antenna Type</b>                    | Sector   |
| <b>Band</b>                            | Single band  |
| <b>Color</b>                           | Light Gray (RAL 7035)  |
| <b>Grounding Type</b>                  | RF connector inner conductor and body grounded to reflector and mounting bracket                                     |
| <b>Performance Note</b>                | Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| <b>Radome Material</b>                 | Fiberglass, UV resistant   |
| <b>Radiator Material</b>               | Aluminum   Low loss circuit board  |
| <b>RF Connector Interface</b>          | 4.3-10 Female  |
| <b>RF Connector Location</b>           | Bottom   |
| <b>RF Connector Quantity, low band</b> | 4  |
| <b>RF Connector Quantity, total</b>    | 4  |

## Remote Electrical Tilt (RET) Information

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

## Dimensions

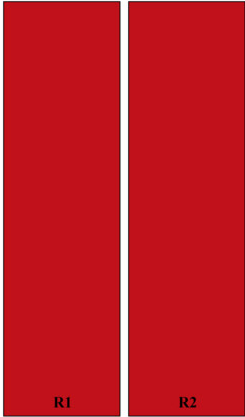
|               |                     |
|---------------|---------------------|
| <b>Width</b>  | 640 mm   25.197 in  |
| <b>Depth</b>  | 235 mm   9.252 in   |
| <b>Length</b> | 2437 mm   95.945 in |

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Net Weight, without mounting kit

53.5 kg | 117.947 lb

## Array Layout



| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID         |
|----------|-----------------|--------------|------|------------|----------|----------------------|
| R1       | 617-806         | 1 - 2        | 65°  | 1          | AISG1    | ANxxxxxxxxxxxxxxxxx1 |
| R2       | 617-806         | 3 - 4        | 65°  |            |          |                      |

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

## Port Configuration



## Electrical Specifications

|                                 |               |
|---------------------------------|---------------|
| <b>Impedance</b>                | 50 ohm        |
| <b>Operating Frequency Band</b> | 617 – 806 MHz |
| <b>Polarization</b>             | ±45°          |

# FF-65C-R1

Total Input Power, maximum

500 W @ 50 °C

## Electrical Specifications

| Frequency Band, MHz                          | 617–698    | 698–806    |
|--|------------|------------|
| Gain, dBi                                    | 15.4       | 15.6       |
| Beamwidth, Horizontal, degrees               | 64         | 63         |
| Beamwidth, Vertical, degrees                 | 10.3       | 9.2        |
| Beam Tilt, degrees                           | 2–13       | 2–13       |
| USLS (First Lobe), dB                        | 19         | 17         |
| Front-to-Back Ratio at 180°, dB              | 33         | 31         |
| Isolation, Cross Polarization, dB            | 28         | 28         |
| Isolation, Inter-band, dB                    | 28         | 28         |
| VSWR   Return loss, dB                       | 1.5   14.0 | 1.5   14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc                |            | -153       |
| Input Power per Port at 50°C, maximum, watts | 250        | 250        |

## Electrical Specifications, BASTA

| Frequency Band, MHz                         | 617–698                              | 698–806                              |
|---|--------------------------------------|--------------------------------------|
| Gain by all Beam Tilts, average, dBi        | 15                                   | 15.3                                 |
| Gain by all Beam Tilts Tolerance, dB        | ±0.6                                 | ±0.5                                 |
| Gain by Beam Tilt, average, dBi             | 2°   14.8<br>8°   15.1<br>13°   15.0 | 2°   15.0<br>8°   15.4<br>13°   15.2 |
| Beamwidth, Horizontal Tolerance, degrees    | ±3.3                                 | ±4.0                                 |
| Beamwidth, Vertical Tolerance, degrees      | ±0.6                                 | ±0.7                                 |
| USLS, beampeak to 20° above beampeak, dB    | 17                                   | 14                                   |
| Front-to-Back Total Power at 180° ± 30°, dB | 22                                   | 22                                   |
| CPR at Boresight, dB                        | 18                                   | 20                                   |
| CPR at Sector, dB                           | 4                                    | 10                                   |

## Mechanical Specifications

|                                  |   |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 1,055.0 N @ 150 km/h (237.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum | 1,433.0 N @ 150 km/h (322.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                          |

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## Packaging and Weights

|                       |                      |
|-----------------------|----------------------|
| <b>Width, packed</b>  | 752 mm   29.606 in   |
| <b>Depth, packed</b>  | 382 mm   15.039 in   |
| <b>Length, packed</b> | 2590 mm   101.969 in |
| <b>Weight, gross</b>  | 79 kg   174.165 lb   |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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

**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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |

