

FF-65B-R1

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



- Supports up to 15° of Mechanical Down Tilt

Electrical Specifications

| Frequency Band, MHz | 617–698 | 698–806 |
|--|------------|------------|
| Gain, dBi | 14.1 | 14.5 |
| Beamwidth, Horizontal, degrees | 66 | 60 |
| Beamwidth, Vertical, degrees | 14.8 | 13.3 |
| Beam Tilt, degrees | 2–14 | 2–14 |
| USLS (First Lobe), dB | 19 | 17 |
| Front-to-Back Ratio at 180°, dB | 34 | 30 |
| 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 |
| Polarization | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 617–698 | 698–806 |
|---|---|---|
| Gain by all Beam Tilts, average, dBi | 13.7 | 14.1 |
| Gain by all Beam Tilts Tolerance, dB | ±0.6 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 2 ° 13.5 8 ° 13.7 14 ° 13.6 | 2 ° 13.9 8 ° 14.2 14 ° 14.1 |
| Beamwidth, Horizontal Tolerance, degrees | ±3.4 | ±4 |
| Beamwidth, Vertical Tolerance, degrees | ±1 | ±1 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 17 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 21 |
| CPR at Boresight, dB | 21 | 26 |
| CPR at Sector, dB | 7 | 9 |

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs](#).

General Specifications

Operating Frequency Band 617 – 806 MHz

FF-65B-R1

| | |
|-----------------------------------|---------------|
| Antenna Type | Sector |
| Band | Single band |
| Performance Note | Outdoor usage |
| Total Input Power, maximum | 900 W @ 50 °C |

Mechanical Specifications

| | |
|--|--|
| RF Connector Quantity, total | 4 |
| RF Connector Quantity, low band | 4 |
| RF Connector Interface | 4.3-10 Female |
| Color | Light gray |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Radiator Material | Aluminum Low loss circuit board |
| Radome Material | Fiberglass, UV resistant |
| RF Connector Location | Bottom |
| Wind Loading, frontal | 172.0 lbf @ 150 km/h 765.0 N @ 150 km/h |
| Wind Loading, lateral | 251.0 N @ 150 km/h 56.4 lbf @ 150 km/h |
| Wind Loading, maximum | 1041.0 N @ 150 km/h 234.0 lbf @ 150 km/h |
| Wind Speed, maximum | 241 km/h 150 mph |

Dimensions

| | |
|---|---------------------|
| Length | 1830.0 mm 72.0 in |
| Width | 640.0 mm 25.2 in |
| Depth | 235.0 mm 9.3 in |
| Net Weight, without mounting kit | 39.5 kg 87.1 lb |

Remote Electrical Tilt (RET) Information

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

Packed Dimensions

| | |
|---------------|---------------------|
| Length | 1982.0 mm 78.0 in |
| Width | 752.0 mm 29.6 in |

Depth 387.0 mm | 15.2 in
Shipping Weight 50.5 kg | 111.3 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)



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.

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance