

6V-10M-F6



12-port multibeam antenna, 12x 1695–2690 MHz, 6x 10-14° HPBW, fixed electrical tilt

- Provides 6 beams covering 1.695-2.69 GHz in 16 deg sectors
- Covers the entire mid-band, including bands 1,3,7,25,66,30,38,40,41
- Increases capacity density for maximum throughput
- Novel design produces stable beam peak positions at mid band
- Each beam supports 2x2 MIMO for high capacity at venues or special events

General Specifications

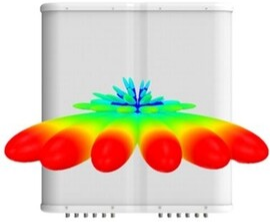
| | |
|---|--|
| Antenna Type | Multibeam |
| Band | Single band |
| Color | Light Gray (RAL 7035) |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Performance Note | Outdoor usage |
| Radome Material | Fiberglass, UV resistant |
| Radiator Material | Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 0 |
| RF Connector Quantity, mid band | 12 |
| RF Connector Quantity, low band | 0 |
| RF Connector Quantity, total | 12 |

Dimensions

| | |
|---------------------------------|--------------------|
| Width | 970 mm 38.189 in |
| Depth | 235 mm 9.252 in |
| Length | 700 mm 27.559 in |
| Net Weight, antenna only | 30 kg 66.139 lb |

Array Layout

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Bottom

| Array | Freq (MHz) | Conns | AZ Pan angles |
|-------|------------|-------|---------------|
| Y1 | 1695-2690 | 1-2 | +40° |
| Y2 | 1695-2690 | 3-4 | +24° |
| Y3 | 1695-2690 | 5-6 | +8° |
| Y4 | 1695-2690 | 7-8 | -8° |
| Y5 | 1695-2690 | 9-10 | -24° |
| Y6 | 1695-2690 | 11-12 | -40° |

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

Port Configuration



Electrical Specifications

| | |
|-----------------------------------|-----------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,000 W |

Electrical Specifications

| | Y1-Y6 | Y1-Y6 | Y1-Y6 | Y1-Y6 | Y1-Y6 |
|----------------------------|-----------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2500 | 2500–2690 |
| RF Port | P1-P12 | P1-P12 | P1-P12 | P1-P12 | P1-P12 |

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| | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|
| Gain, dBi | 20.7 | 21.2 | 21.4 | 22.2 | 22.1 |
| Beam Centers, Horizontal, degrees | ±8 ±24 ±40 | ±8 ±24 ±40 | ±8 ±24 ±40 | ±8 ±24 ±40 | ±8 ±24 ±40 |
| Beam Crossover, dB | 7 | 8 | 9 | 10 | 13 |
| Beamwidth, Horizontal, degrees | 12 | 11 | 11 | 10 | 9 |
| Beamwidth, Vertical, degrees | 15.4 | 14.2 | 13.6 | 11.6 | 10.7 |
| Beam Tilt, degrees | 6 | 6 | 6 | 6 | 6 |
| USLS (First Lobe), dB | 15 | 15 | 15 | 15 | 15 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 |
| Isolation, Beam to Beam, dB | 19 | 19 | 19 | 19 | 18 |
| VSWR Return loss, dB | 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 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 200 | 200 | 200 | 200 | 200 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 868.0 N @ 150 km/h (195.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 265.0 N @ 150 km/h (59.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 868.0 N @ 150 km/h (195.1 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 1084 mm 42.677 in |
| Depth, packed | 365 mm 14.37 in |
| Length, packed | 816 mm 32.126 in |
| Weight, gross | 43 kg 94.799 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Above maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |

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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