

# 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

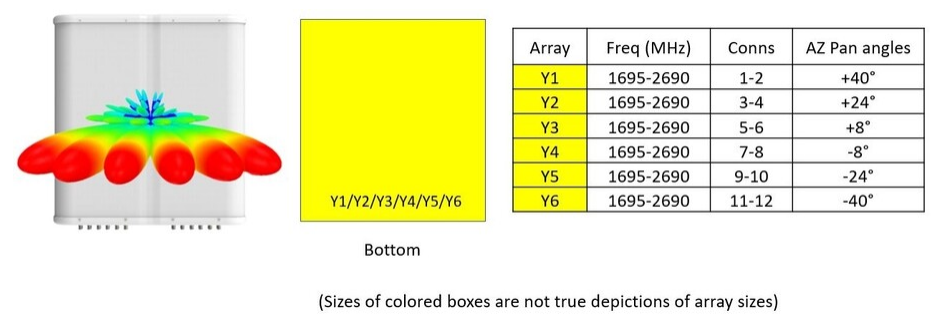
|                                  |                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------|
| Antenna Type                     | Multibeam                                                                        |
| 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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## 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<br>±24<br>±40 | ±8<br>±24<br>±40 | ±8<br>±24<br>±40 | ±8<br>±24<br>±40 | ±8<br>±24<br>±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               |
| CPR at Boresight, dB                 | 16               | 23               | 22               | 17               | 20               |
| 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.<br>Kit contains one scissor top bracket set and one bottom bracket set. |
|----------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## \* Footnotes

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| <b>Performance Note</b> | Severe environmental conditions may degrade optimum performance |
|-------------------------|-----------------------------------------------------------------|