

# 6P-6M-A3

6-port sector antenna, 6x 1695–2690 MHz, 65° HPBW, 3x RET



- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- With tilt indicators and integrated pluggable RET
- Wind Loading: Frontal / Lateral / Rear – 524 / 58 / 482 N @ 150km/h
- Conforms to RoHS 2011/65/EU

## General Specifications

|   |  |
|---|--|
| <b>Antenna Type</b>                     | Sector   |
| <b>Band</b>                             | Single band  |
| <b>Color</b>                            | Light gray   |
| <b>Grounding Type</b>                   | RF connector body grounded to reflector and mounting bracket |
| <b>Performance Note</b>                 | Outdoor usage  |
| <b>Radome Material</b>                  | Fiberglass, UV resistant                                     |
| <b>Radiator Material</b>                | Aluminum   |
| <b>Reflector Material</b>               | Aluminum   |
| <b>RF Connector Interface</b>           | 4.3-10 Female  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 6  |
| <b>RF Connector Quantity, total</b>     | 6  |

## Remote Electrical Tilt (RET) Information, General

|                      |   |
|----------------------|---|
| <b>RET Hardware</b>  | RET-PMOD-A20-3  |
| <b>RET Interface</b> | 2x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out: Female Pin3: RS485A(AISG_B), Pin5: RS485B(AISG_A), Pin6: DC 10~30V, Pin7: DC_Return |

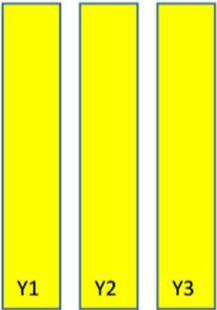
## Dimensions

|               |                    |
|---------------|--------------------|
| <b>Width</b>  | 377 mm   14.843 in |
| <b>Length</b> | 1397 mm   55 in    |
| <b>Depth</b>  | 87 mm   3.425 in   |

## Array Layout

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Left  
Bottom  
Right

| Array | Freq(MHz) | Conns | RET (SRET) | AISG RET UID       |
|-------|-----------|-------|------------|--------------------|
| Y1    | 1695-2690 | 1-2   | 1          | CPXXXXXXXXXXXXXXY1 |
| Y2    | 1695-2690 | 3-4   | 2          | CPXXXXXXXXXXXXXXY2 |
| Y3    | 1695-2690 | 5-6   | 3          | CPXXXXXXXXXXXXXXY3 |

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

## Port Configuration

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## Electrical Specifications

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Impedance</b>                  | 50 ohm          |
| <b>Operating Frequency Band</b>   | 1695 – 2690 MHz |
| <b>Polarization</b>               | $\pm 45^\circ$  |
| <b>Total Input Power, maximum</b> | 600 W           |

## Remote Electrical Tilt (RET) Information, Electrical

|  |                            |
|--|----------------------------|
| <b>Protocol</b>                                      | 3GPP/AISG 2.0 (Single RET) |
| <b>Power Consumption, idle state, maximum</b>        | 2 W                        |
| <b>Power Consumption, normal conditions, maximum</b> | 10 W                       |
| <b>Input Voltage</b>                                 | 10–30 Vdc                  |
| <b>Internal RET</b>                                  | High band (3)              |

# 6P-6M-A3

## Electrical Specifications

| Frequency Band, MHz                                | 1695–1880  | 1850–1990  | 1920–2200  | 2300–2500  | 2500–2690  |
|--|------------|------------|------------|------------|------------|
| Gain, dBi  | 17.1       | 17.5       | 17.9       | 18.3       | 18.2       |
| Beamwidth, Horizontal, degrees                     | 67         | 65         | 63         | 59         | 58         |
| Beamwidth, Vertical, degrees                       | 7.2        | 6.9        | 6.4        | 5.5        | 5.3        |
| Beam Tilt, degrees                                 | 2–12       | 2–12       | 2–12       | 2–12       | 2–12       |
| USLS (First Lobe), dB                              | 19         | 21         | 19         | 18         | 20         |
| Front-to-Back Ratio, Copolarization 180° ± 30°, dB | 31         | 33         | 32         | 31         | 30         |
| Isolation, Cross Polarization, dB                  | 28         | 28         | 28         | 28         | 28         |
| Isolation, Inter-band, dB                          | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc                      | -150       | -150       | -150       | -150       | -150       |
| Input Power per Port, maximum, watts               | 250        | 250        | 250        | 250        | 250        |

## Electrical Specifications, BASTA

| Frequency Band, MHz                         | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2500 | 2500–2690 |
|---|-----------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi        | 16.8      | 17.3      | 17.6      | 17.9      | 17.7      |
| Gain by all Beam Tilts Tolerance, dB        | ±0.6      | ±0.4      | ±0.4      | ±0.6      | ±0.7      |
| Beamwidth, Horizontal Tolerance, degrees    | ±4.8      | ±2.8      | ±4.2      | ±3.7      | ±3.9      |
| Beamwidth, Vertical Tolerance, degrees      | ±0.4      | ±0.4      | ±0.6      | ±0.5      | ±0.4      |
| USLS, beampeak to 20° above beampeak, dB    | 18        | 18        | 17        | 15        | 15        |
| Front-to-Back Total Power at 180° ± 30°, dB | 25        | 28        | 28        | 28        | 27        |
| CPR at Boresight, dB                        | 24        | 26        | 26        | 25        | 24        |
| CPR at Sector, dB                           | 11        | 12        | 12        | 7         | 6         |

## Mechanical Specifications

|                                   |   |
|-----------------------------------|---|
| Wind Loading at Velocity, frontal | 118.0 lbf @ 150 km/h   524.0 N @ 150 km/h |
| Wind Loading at Velocity, lateral | 13.3 lbf @ 150 km/h   58.0 N @ 150 km/h   |
| Wind Speed, maximum               | 241 km/h   149.75 mph                     |

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## Packaging and Weights

|   |                     |
|---|---------------------|
| <b>Width, packed</b>                    | 472 mm   18.583 in  |
| <b>Depth, packed</b>                    | 207 mm   8.15 in    |
| <b>Length, packed</b>                   | 1627 mm   64.055 in |
| <b>Net Weight, without mounting kit</b> | 20 kg   44.092 lb   |
| <b>Weight, gross</b>                    | 23 kg   50.706 lb   |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CE            | Compliant with the relevant CE product directives  |
| 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  |



## Included Products

BSAMNT- — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor  
B95-03 top bracket set and one bottom bracket set.

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance