

# 6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

Utilizes AccuRET® actuator(s) on the back of the antenna

This product will be discontinued on: March 30, 2024

### General Specifications

Antenna Type Sector

Band Multiband

**Grounding Type** RF connector inner conductor and body grounded to reflector and

mounting bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome Material Fiberglass, UV resistant

Radiator Material Aluminum | Low loss circuit board

Reflector Material Aluminum

**RF Connector Interface** 7-16 DIN Female

**RF Connector Location** Bottom

RF Connector Quantity, high band 4
RF Connector Quantity, low band 2
RF Connector Quantity, total 6

#### Remote Electrical Tilt (RET) Information

**RET Interface** 8-pin DIN Female | 8-pin DIN Male

**RET Interface, quantity** 3 female | 3 male

Input Voltage 10-30 Vdc

Internal RET High band (2) | Low band (1)

Power Consumption, idle state, maximum 1 W Power Consumption, normal conditions, maximum 8 W

**Protocol** 3GPP/AISG 2.0 (Single RET)

COMMSCOPE®

#### **Dimensions**

 Width
 301 mm | 11.85 in

 Depth
 181 mm | 7.126 in

 Length
 1412 mm | 55.591 in

 Net Weight, without mounting kit
 18.6 kg | 41.006 lb

### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 850 W @ 50 °C

### **Electrical Specifications**

| Frequency Band, MHz                          | 694-790    | 790-890    | 890-960    | 1695-1920  | 1920-2180  | 2500-2690  |
|--|------------|------------|------------|------------|------------|------------|
| Gain, dBi                                    | 13.8       | 14.1       | 14.5       | 17.2       | 17.5       | 16.7       |
| Beamwidth, Horizontal,<br>degrees            | 72         | 70         | 68         | 60         | 63         | 63         |
| Beamwidth, Vertical, degrees                 | 16.9       | 15.3       | 14.2       | 7.3        | 6.6        | 6.4        |
| Beam Tilt, degrees                           | 3-18       | 3-18       | 3-18       | 3-13       | 3-13       | 3-13       |
| USLS (First Lobe), dB                        | 16         | 20         | 17         | 18         | 18         | 17         |
| Front-to-Back Ratio at 180°,<br>dB           | 28         | 33         | 31         | 29         | 32         | 29         |
| Isolation, Cross Polarization, dB            | 25         | 25         | 25         | 25         | 25         | 25         |
| Isolation, Inter-band, dB                    | 30         | 30         | 30         | 30         | 30         | 30         |
| VSWR   Return loss, dB                       | 1.5   14.0 | 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       | -150       |
| Input Power per Port at 50°C, maximum, watts | 300        | 300        | 300        | 250        | 250        | 100        |

### Electrical Specifications, BASTA

| Frequency Band, MHz                     | 694-790 | 790-890 | 890-960 | 1695-1920 | 1920-2180 | 2500-2690 |
|---|---------|---------|---------|-----------|-----------|-----------|
| Gain by all Beam Tilts,<br>average, dBi | 13.5    | 14      | 14.2    | 16.6      | 17.2      | 16.3      |
| Gain by all Beam Tilts                  | ±0.4    | ±0.3    | ±0.5    | ±0.9      | ±0.5      | ±0.7      |



| Gain by Beam Tilt, average,<br>dBi          | 3° 13.6<br>10° 13.6<br>18° 13.4 | 3° 14.0<br>10° 14.0<br>18° 13.8 | 3° 14.5<br>10° 14.2<br>18° 13.7 | 3° 16.6<br>8° 16.8<br>13° 16.4 | 3° 17.1<br>8° 17.3<br>13° 16.8 | 3° 16.3<br>8° 16.6<br>13° 15.6 |
|---|---------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Beamwidth, Horizontal<br>Tolerance, degrees | ±2                              | ±1.5                            | ±2.8                            | ±8                             | ±8.9                           | ±5.4                           |
| Beamwidth, Vertical<br>Tolerance, degrees   | ±1.2                            | ±0.8                            | ±1.1                            | ±0.5                           | ±0.5                           | ±0.4                           |
| USLS, beampeak to 20° above beampeak, dB    | 15                              | 18                              | 17                              | 12                             | 14                             | 10                             |
| Front-to-Back Total Power at 180° ± 30°, dB | 23                              | 24                              | 21                              | 23                             | 23                             | 23                             |
| CPR at Boresight, dB                        | 19                              | 19                              | 18                              | 16                             | 17                             | 21                             |
| CPR at Sector, dB                           | 8                               | 9                               | 7                               | 10                             | 11                             | 9                              |

### Mechanical Specifications

| Wind Loading @ Velocity, frontal | 205.0 N @ 150 km/h (46.1 lbf @ 150 km/h) |
|----------------------------------|--|
| Wind Loading @ Velocity, lateral | 169.0 N @ 150 km/h (38.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 396.0 N @ 150 km/h (89.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 208.0 N @ 150 km/h (46.8 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                       |

### Packaging and Weights

| Width, packed  | 429 mm   16.89 in   |
|----------------|---------------------|
| Depth, packed  | 329 mm   12.953 in  |
| Length, packed | 1672 mm   65.827 in |
| Weight, gross  | 31.9 kg   70.327 lb |

### Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



### Included Products

BSAMNT-OFFSET – Forward Offset Pipe Mounting Kit for 4.5 in (114.3 mm) OD round members

### \* Footnotes

**COMMSCOPE®** 

**Performance Note** 

Severe environmental conditions may degrade optimum performance

