

12P-4L8M-B6-V3



12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Antenna with tilt scale indicators and integrated pluggable RET

General Specifications

| | |
|--|--|
| Antenna Type | Sector |
| Band | Multiband |
| 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 | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, mid band | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 12 |

Remote Electrical Tilt (RET) Information

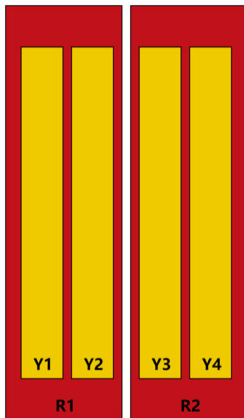
| | |
|---|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | Low band (2) Mid band (4) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

12P-4L8M-B6-V3

| | |
|---------------------------------|---------------------|
| Width | 499 mm 19.646 in |
| Depth | 199 mm 7.835 in |
| Length | 2000 mm 78.74 in |
| Net Weight, antenna only | 24.8 kg 54.675 lb |

Array Layout



| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------|------------|----------|----------------------|
| R1 | 694-960 | 1 - 2 | 65° | 1 | AISG1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 65° | 2 | AISG1 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 65° | 3 | AISG1 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7 - 8 | 65° | 4 | AISG1 | CPxxxxxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 9 - 10 | 65° | 5 | AISG1 | CPxxxxxxxxxxxxxxxxY3 |
| Y4 | 1695-2690 | 11 - 12 | 65° | 6 | AISG1 | CPxxxxxxxxxxxxxxxxY4 |

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

Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,000 W |

Electrical Specifications

| | R1,R2 | R1,R2 | R1,R2 | Y1-Y4 | Y1-Y4 | Y1-Y4 | Y1-Y4 | Y1-Y4 |
|---|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz | 694–806 | 790–896 | 880–960 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2490 | 2500–2690 |
| RF Port | 1-4 | 1-4 | 1-4 | 5-12 | 5-12 | 5-12 | 5-12 | 5-12 |
| Gain, dBi | 15.2 | 15.6 | 15.7 | 17.4 | 17.8 | 17.9 | 18.2 | 18.6 |
| Beamwidth, Horizontal, degrees | 63 | 67 | 66 | 70 | 68 | 67 | 61 | 58 |
| Beamwidth, Vertical, degrees | 11.2 | 9.8 | 9.1 | 6.2 | 5.9 | 5.6 | 4.8 | 4.2 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 19 | 18 | 16 | 16 | 18 | 20 | 22 | 19 |
| Front-to-Back Ratio, Copolarization 180° ± 30°, dB | 26 | 26 | 27 | 27 | 27 | 27 | 24 | 27 |
| Isolation, Cross Polarization, | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

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dB

| | | | | | | | | |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 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 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port, maximum, watts | 250 | 250 | 250 | 200 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 694–806 | 790–896 | 880–960 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2490 | 2500–2690 |
|---|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|
| Gain by all Beam Tilts, average, dBi | 14.9 | 15.3 | 15.4 | 16.9 | 17.3 | 17.5 | 17.7 | 18 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.3 | ±0.4 | ±0.8 | ±0.6 | ±0.7 | ±0.9 | ±0.9 |
| Beamwidth, Horizontal Tolerance, degrees | ±7 | ±8 | ±9 | ±8 | ±8 | ±7 | ±7 | ±5 |
| Beamwidth, Vertical Tolerance, degrees | ±1.1 | ±0.7 | ±0.6 | ±0.4 | ±0.2 | ±0.4 | ±0.3 | ±0.3 |
| CPR at Boresight, dB | 23 | 22 | 21 | 20 | 21 | 22 | 20 | 19 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 560.0 N @ 150 km/h (125.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 259.0 N @ 150 km/h (58.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 625.0 N @ 150 km/h (140.5 lbf @ 150 km/h) |
| Wind Speed, maximum | 200 km/h (124 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 593 mm 23.346 in |
| Depth, packed | 317 mm 12.48 in |
| Length, packed | 2197 mm 86.496 in |
| Weight, gross | 36.4 kg 80.248 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| UK-ROHS | Compliant |

Included Products

12P-4L8M-B6-V3

BSAMNT-B95-04

- 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