

2H-33A-R2



4-port multibeam antenna, 4x 1695–2400 MHz, 2x 38° HPBW, 2x RET

- Enhances network capacity through six sectors site application with only three antenna faces
- Maximizes frequency spectrum utilization to increase Average Revenue Per User (ARPU)
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs
- High gain with excellent sector edge roll-off and azimuth sidelobe suppression
- Each antenna downtilt can be independently adjusted for greater flexibility in network optimization

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 Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| 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 | 4 |
| RF Connector Quantity, total | 4 |

Remote Electrical Tilt (RET) Information

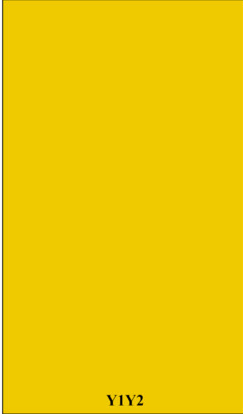
| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

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| | |
|---|---------------------|
| Width | 350 mm 13.78 in |
| Depth | 208 mm 8.189 in |
| Length | 1400 mm 55.118 in |
| Net Weight, without mounting kit | 17.6 kg 38.801 lb |

Array Layout

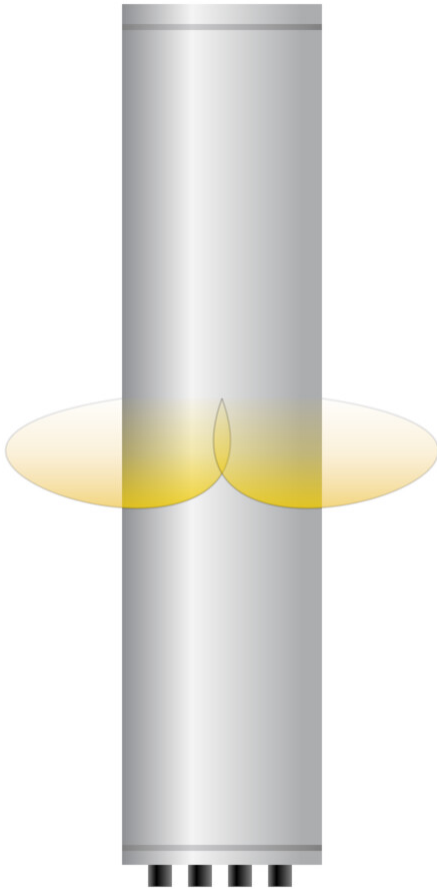


| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------|------------|----------|----------------------|
| Y1 | 1695-2400 | 1 - 2 | 33° | 1 | AISG1 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2400 | 3 - 4 | 33° | 2 | AISG1 | CPxxxxxxxxxxxxxxxxY2 |

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

Beams Configuration

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Electrical Specifications

| | |
|---------------------------------|-----------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2400 MHz |
| Polarization | ±45° |

Electrical Specifications

| Frequency Band, MHz | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2400 |
|--|------------------|------------------|------------------|------------------|
| Gain, dBi | 19.1 | 19.6 | 19.9 | 19.1 |
| Beam Centers, Horizontal, degrees | ±27 | ±27 | ±27 | ±27 |
| Beamwidth, Horizontal, degrees | 38 | 35.8 | 34 | 30 |
| Beamwidth, Vertical, degrees | 7.5 | 7 | 6.5 | 5.9 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 |

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| | | | | |
|---|------------|------------|------------|------------|
| USLS (First Lobe), dB | 20 | 20 | 19 | 18 |
| Front-to-Back Ratio at 180°, dB | 34 | 37 | 37 | 30 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 16 | 16 | 16 | 16 |
| VSWR Return loss, dB | 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 |
| Input Power per Port, maximum, watts | 250 | 250 | 250 | 250 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 221.0 N @ 150 km/h (49.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 185.0 N @ 150 km/h (41.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 469.0 N @ 150 km/h (105.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 234.0 N @ 150 km/h (52.6 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 447 mm 17.598 in |
| Depth, packed | 354 mm 13.937 in |
| Length, packed | 1544 mm 60.787 in |
| Weight, gross | 30 kg 66.139 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| 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 |



Included Products

- BSAMNT-3 – 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.

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* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance