

2NN-33C-HG-R2B



8-port Next Generation PerformMax™ Superior Coverage and Capacity multibeam antenna, 8x 698–894 MHz, 33° HPBW, 8ft, 2x RET

- Ideal 4T4R low band antenna for use with an FD mMIMO antenna
- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Best in class PIM immunity
- Internal SBT allows remote RET control from the radio over the RF jumper cable

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, low band | 8 |

Remote Electrical Tilt (RET) Information

| | |
|---|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 Port 5 |
| Internal RET | Low band (2) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |

2NN-33C-HG-R2B

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

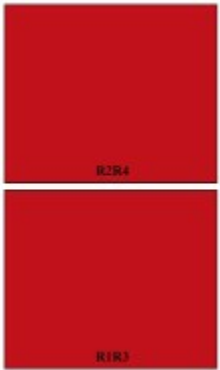
Width 749 mm | 29.488 in

Depth 197 mm | 7.756 in

Length 2438 mm | 95.984 in

Net Weight, without mounting kit 61.8 kg | 136.246 lb

Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (SAET) | AISG No. | SBT # of ports | SBT No. | RET UID |
|----------|-----------------|--------------|------------|----------|----------------|---------|----------------------|
| R1 | 698-894 | 1 - 2 | 1 | AISG1 | 1 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 698-894 | 3 - 4 | | | | | |
| R3 | 698-894 | 5 - 6 | 2 | AISG2 | 5 | 2 | CPxxxxxxxxxxxxxxxxR3 |
| R4 | 698-894 | 7 - 8 | | | | | |

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

2NN-33C-HG-R2B

| | |
|-----------------------------------|---------------|
| Operating Frequency Band | 698 – 894 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,000 W |

Electrical Specifications

| | R1-R4 | R1-R4 |
|---|----------------|----------------|
| Frequency Band, MHz | 698–798 | 824–894 |
| RF Port | 1-8 | 1-8 |
| Gain, Maximum, dBi | 16.8 | 17.5 |
| Gain, dBi | 16.3 | 17.2 |
| Beam Centers, Horizontal, degrees | ±27 | ±27 |
| Beamwidth, Horizontal, degrees | 33 | 30 |
| Beamwidth, Vertical, degrees | 18.9 | 16.9 |
| Beam Tilt, degrees | 2–16 | 2–16 |
| Horizontal Sidelobe, dB | 20 | 21 |
| USLS (First Lobe), dB | 17 | 18 |
| Front-to-Back Ratio, Copolarization 180° ± 30°, dB | 27 | 33 |
| CPR at Boresight, dB | 21 | 22 |
| Isolation, Cross Polarization, dB | 25 | 25 |
| Isolation, Beam to Beam, dB | 17 | 17 |
| VSWR Return loss, dB | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 |
| Input Power per Port, maximum, watts | 200 | 200 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 268.0 N @ 150 km/h (60.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------------|--------------------|
| Width, packed | 915 mm 36.024 in |
| Depth, packed | 357 mm 14.055 in |

2NN-33C-HG-R2B

Length, packed 3202 mm | 126.063 in

Weight, gross 98.4 kg | 216.935 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------|----------------|
| UK-ROHS | Compliant |

Included Products

- BSAMNT-9 – 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.
- BSAMNT-M9 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance