



SBNH-1D6565C

Andrew® Dual Band Antenna, 698–896 MHz and 1710–2180 MHz, 65° horizontal beamwidth, internal RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal next generation actuator eliminates field installation and defines new standards for reliability

OBSOLETE

This product was discontinued on: December 31, 2014

Replaced By

| | |
|---------------|---|
| SBNH-1D65C | Andrew® Dualband Antenna, 698–896 MHz and 1710–2360 MHz, 65° horizontal beamwidth, internal RETs. |
| SBNH-1D65C-SR | Andrew® Dualband Antenna, 698–896 MHz and 1710–2360 MHz, 65° horizontal beamwidth, internal RETs. |

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2180 |
|--------------------------------------|------------|------------|------------|------------|------------|
| Gain, dBi | 15.8 | 16.6 | 18.0 | 18.0 | 18.5 |
| Beamwidth, Horizontal, degrees | 72 | 67 | 60 | 59 | 60 |
| Beamwidth, Vertical, degrees | 8.6 | 7.8 | 5.6 | 5.2 | 4.9 |
| Beam Tilt, degrees | 0–11 | 0–11 | 0–7 | 0–7 | 0–7 |
| USLS (First Lobe), dB | 15 | 15 | 18 | 16 | 16 |
| Front-to-Back Ratio at 180°, dB | 25 | 28 | 34 | 31 | 31 |
| CPR at Boresight, dB | 26 | 20 | 18 | 18 | 18 |
| CPR at Sector, dB | 13 | 8 | 9 | 8 | 9 |
| Isolation, dB | 30 | 30 | 30 | 30 | 30 |
| Isolation, Intersystem, dB | 35 | 35 | 35 | 35 | 35 |
| 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 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 400 | 400 | 300 | 300 | 300 |
| Polarization | ±45° | ±45° | ±45° | ±45° | ±45° |
| Impedance | 50 ohm | 50 ohm | 50 ohm | 50 ohm | 50 ohm |

Electrical Specifications, BASTA*

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2180 |
|---|-------------|-------------|------------|------------|------------|
| Gain by all Beam Tilts, average, dBi | 15.6 | 16.3 | 17.8 | 17.9 | 18.2 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.4 | ±0.3 | ±0.2 | ±0.5 |
| | 0 ° 15.6 | 0 ° 16.2 | 0 ° 18.0 | 0 ° 17.8 | 0 ° 18.0 |
| Gain by Beam Tilt, average, dBi | 6 ° 15.7 | 6 ° 16.4 | 4 ° 17.9 | 4 ° 17.9 | 4 ° 18.2 |
| | 11 ° 15.3 | 11 ° 16.1 | 7 ° 17.6 | 7 ° 17.8 | 7 ° 18.1 |
| Beamwidth, Horizontal Tolerance, degrees | ±3 | ±3.1 | ±3.2 | ±2 | ±3.3 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.4 | ±0.3 | ±0.2 | ±0.4 |
| USLS, beampeak to 20° above beampeak, dB | 17 | 17 | 18 | 18 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 21 | 30 | 29 | 27 |
| CPR at Boresight, dB | 26 | 20 | 18 | 18 | 18 |
| CPR at Sector, dB | 13 | 8 | 9 | 8 | 9 |

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

SBNH-1D6565C

General Specifications

| | |
|--------------------------|--------------------------------------|
| Antenna Brand | Andrew® |
| Antenna Type | DualPol® multiband with internal RET |
| Band | Multiband |
| Brand | DualPol® Teletilt® |
| Operating Frequency Band | 1710 – 2180 MHz 698 – 896 MHz |
| Performance Note | Outdoor usage |

Mechanical Specifications

| | |
|------------------------------|--|
| Color | Light gray |
| Lightning Protection | dc Ground |
| Radiator Material | Aluminum |
| Radome Material | Fiberglass, UV resistant |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, total | 4 |
| Wind Loading, maximum | 879.0 N @ 150 km/h 197.6 lbf @ 150 km/h |
| Wind Speed, maximum | 241 km/h 150 mph |

Dimensions

| | |
|------------|---------------------|
| Depth | 181.0 mm 7.1 in |
| Length | 2449.0 mm 96.4 in |
| Width | 301.0 mm 11.9 in |
| Net Weight | 23.5 kg 51.8 lb |

Remote Electrical Tilt (RET) Information

| | |
|---|-----------------------------------|
| Input Voltage | 10–30 Vdc |
| Power Consumption, idle state, maximum | 2.0 W |
| Power Consumption, normal conditions, maximum | 11.0 W |
| Protocol | 3GPP/AISG 2.0 (Multi-RET) |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| RET System | Teletilt® |

Packed Dimensions

| | |
|-----------------|----------------------|
| Depth | 292.0 mm 11.5 in |
| Length | 2572.0 mm 101.3 in |
| Width | 409.0 mm 16.1 in |
| Shipping Weight | 34.9 kg 76.9 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|--------|----------------|
|--------|----------------|

SBNH-1D6565C

RoHS 2011/65/EU
China RoHS SJ/T 11364-2006

Compliant by Exemption
Above Maximum Concentration Value (MCV)



Included Products

DB380-5083 — Standard two point mounting system to secure BSA panels to pipes with an OD measuring 2.4-4.5" (60-115mm). Includes locking downtilt brackets and heavy gauge pipe brackets to provide superior windload performance.

* Footnotes

| | |
|------------------|---|
| Performance Note | Severe environmental conditions may degrade optimum performance |
|------------------|---|