

SBNH-1D65C-SR



4-port sector antenna, 2x 698-896 and 2x 1710-2360 MHz, 65° HPBW, 2x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package

This product will be discontinued on: March 30, 2022

General Specifications

| | |
|----------------------------------|--|
| Antenna Type | Sector |
| Band | Multiband |
| Color | Light gray |
| 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 | Aluminum Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 2 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 4 |

Remote Electrical Tilt (RET) Information

| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (1) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |

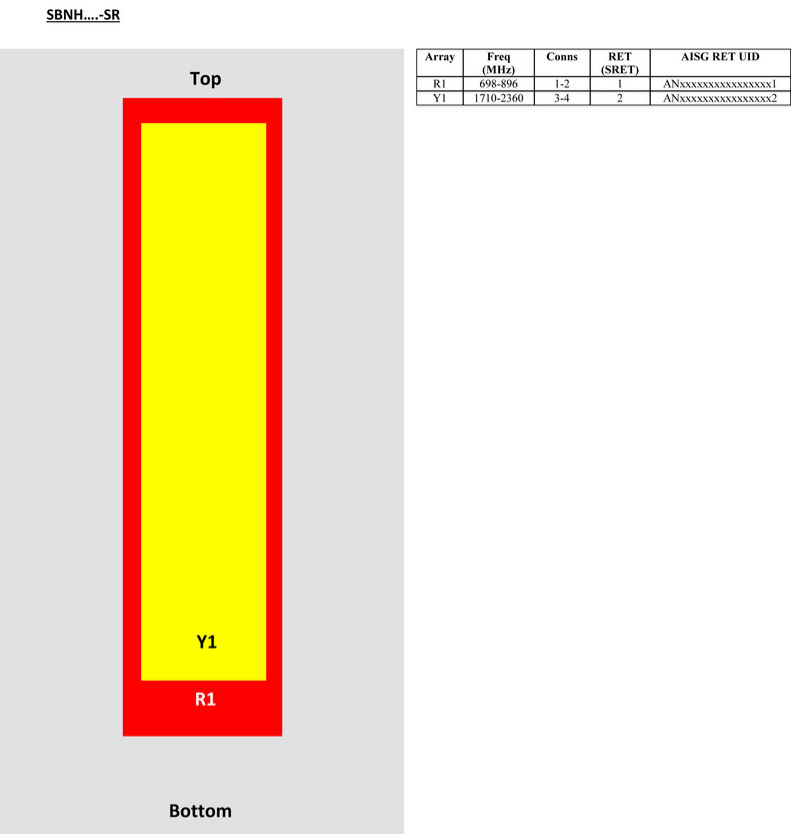
SBNH-1D65C-SR

| | |
|---|----------------------------|
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|----------------------------------|---------------------|
| Width | 301 mm 11.85 in |
| Depth | 181 mm 7.126 in |
| Length | 2451 mm 96.496 in |
| Net Weight, without mounting kit | 22.5 kg 49.604 lb |

Array Layout



View from the front of the antenna
(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

| | |
|-----------|--------|
| Impedance | 50 ohm |
|-----------|--------|

SBNH-1D65C-SR

Operating Frequency Band

1710 – 2360 MHz | 698 – 896 MHz

Polarization

±45°

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi | 16.1 | 15.6 | 17.6 | 17.8 | 18.3 | 18.3 |
| Beamwidth, Horizontal, degrees | 66.2 | 64 | 70.8 | 64.6 | 63 | 58 |
| Beamwidth, Vertical, degrees | 8.8 | 7.8 | 5.7 | 5.2 | 5 | 4.4 |
| Beam Tilt, degrees | 0–11 | 0–11 | 0–7 | 0–7 | 0–7 | 0–7 |
| USLS (First Lobe), dB | 13 | 12 | 16 | 15 | 17 | 18 |
| Front-to-Back Ratio at 180°, dB | 30 | 34 | 32 | 29 | 28 | 31 |
| 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 | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port, maximum, watts | 400 | 400 | 350 | 350 | 350 | 300 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–806 | 806–896 | 1710–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|--------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Gain by all Beam Tilts, average, dBi | 15.8 | 15.3 | 17.3 | 17.7 | 18 | 18.1 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.7 | ±0.4 | ±0.3 | ±0.5 | ±0.3 |
| Gain by Beam Tilt, average, dBi | 0° 15.7 5° 15.9 11° 15.6 | 0° 15.3 5° 15.4 11° 15.0 | 0° 17.3 4° 17.3 7° 17.2 | 0° 17.6 4° 17.8 7° 17.6 | 0° 17.9 4° 18.0 7° 18.0 | 0° 18.0 4° 18.2 7° 18.2 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.2 | ±2.2 | ±3.7 | ±4.3 | ±3.2 | ±3.5 |
| Beamwidth, Vertical Tolerance, degrees | ±0.6 | ±0.6 | ±0.3 | ±0.2 | ±0.3 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 13 | 11 | 16 | 15 | 16 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 23 | 27 | 25 | 25 | 26 |
| CPR at Boresight, dB | 30 | 25 | 18 | 19 | 18 | 22 |

SBNH-1D65C-SR

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|-------------------|----|----|----|----|----|---|
| CPR at Sector, dB | 15 | 11 | 15 | 12 | 11 | 5 |
|-------------------|----|----|----|----|----|---|

Mechanical Specifications

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|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 395.0 N @ 150 km/h (88.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 332.0 N @ 150 km/h (74.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 761.0 N @ 150 km/h (171.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 400.0 N @ 150 km/h (89.9 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h 149.75 mph |

Packaging and Weights

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|----------------|---------------------|
| Width, packed | 409 mm 16.102 in |
| Depth, packed | 299 mm 11.772 in |
| Length, packed | 2572 mm 101.26 in |
| Weight, gross | 35.2 kg 77.603 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |



Included Products

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| 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

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