# NH180QS-DG-FOM



2-port small cell antenna, 2x (698-896 and 1710–2180 MHz), 180° HPBW with fixed tilt in the low band and manual tilt in the high band. Contains internal diplexer and active GPS L1 band antenna

#### OBSOLETE

This product was discontinued on: November 30, 2023Replaced By:VVSSP-180HS-F210-port small cell antenna, 4

10-port small cell antenna, 4x 1695–2690, 4x 3100-4200 MHz, 2x 5150-5925 MHz, heart shape pattern, fixed tilt.

### General Specifications

| Antenna Type                                      | Small Cell   |
|---|--|
| Band  | Multiband  |
| Color   | Light Gray (RAL 7035)  |
| GPS Connector Interface                           | 4.1-9.5 DIN Female   |
| GPS Connector Quantity                            | 1  |
| Grounding Type                                    | RF connector inner conductor and body grounded to reflector and mounting bracket                                     |
| Internal GPS frequency band                       | 1,575.42 MHz   |
| Internal GPS VSWR                                 | 2  |
| Performance Note                                  | Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| Radome Material                                   | ASA, UV stabilized   |
| Radiator Material                                 | Aluminum   Low loss circuit board  |
| Reflector Material                                | Aluminum   |
| RF Connector Interface                            | 7-16 DIN Female  |
| RF Connector Location                             | Bottom   |
| RF Connector Quantity, diplexed low and mid bands | 2  |
| RF Connector Quantity, total                      | 2  |
| Dimensions  |  |
| Length  | 728 mm   28.661 in   |



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| t Weight, without mounting kit 11.5 kg   25.353 lb |                                 |  |
|--|---------------------------------|--|
| Outer Diameter                                     | 305 mm   12.008 in              |  |
| Electrical Specifications                          |                                 |  |
| Impedance  | 50 ohm                          |  |
| Operating Frequency Band                           | 1710 – 2180 MHz   698 – 896 MHz |  |
| Polarization                                       | ±45°                            |  |

# **Electrical Specifications**

| Frequency Band, MHz                     | 698-806    | 806-896    | 1710-1880  | 1850-1990  | 1920-2180  |
|---|------------|------------|------------|------------|------------|
| Gain, dBi                               | 6          | 7          | 9.7        | 9.7        | 9.9        |
| Beamwidth, Horizontal,<br>degrees       | 192        | 180        | 181        | 182        | 180        |
| Beamwidth, Vertical, degrees            | 36.8       | 34         | 15.3       | 14.1       | 13.3       |
| Beam Tilt, degrees                      | 0          | 0          | 0-16       | 0-16       | 0-16       |
| USLS (First Lobe), dB                   | 19         | 16         | 16         | 13         | 12         |
| Isolation, Cross Polarization,<br>dB    | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc           | -153       | -153       | -153       | -153       | -153       |
| Input Power per Port,<br>maximum, watts | 125        | 125        | 125        | 125        | 125        |

## Mechanical Specifications

| Wind Loading @ Velocity, frontal | 121.0 N @ 150 km/h (27.2 lbf @ 150 km/h) |
|----------------------------------|--|
| Wind Loading @ Velocity, maximum | 121.0 N @ 150 km/h (27.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 121.0 N @ 150 km/h (27.2 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                       |

### Packaging and Weights

| Width, packed  | 427 mm   16.811 in  |
|----------------|---------------------|
| Depth, packed  | 407 mm   16.024 in  |
| Length, packed | 998 mm   39.291 in  |
| Weight, gross  | 16.2 kg   35.715 lb |

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## Regulatory Compliance/Certifications

#### Classification

| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
|---------------|--|
| REACH-SVHC    | Compliant as per SVHC revision on www.andrew.com/ProductCompliance             |

## \* Footnotes

Agency

Performance Note Severe environmental conditions may degrade optimum performance



