

# 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

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	1710–1880	1850–1990	1920–2180
Gain, dBi	6.0	7.0	9.7	9.7	9.9
Beamwidth, Horizontal, degrees	192	180	181	182	180
Beamwidth, Vertical, degrees	36.8	34.0	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, 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, maximum, watts	125	125	125	125	125
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	6.2	6.5	9.2	9.4	9.5
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.9	±0.7	±0.7	±0.8
Gain by Beam Tilt, average, dBi			0 °   9.5 8 °   9.3 16 °   8.7	0 °   9.7 8 °   9.5 16 °   9.0	0 °   9.9 8 °   9.6 16 °   9.1
Beamwidth, Horizontal Tolerance, degrees	±7.2	±8.7	±8.5	±6.3	±7
Beamwidth, Vertical Tolerance, degrees	±3.9	±3.1	±1.4	±0.7	±1.3
USLS, beampeak to 20° above beampeak, dB			17	14	12

\* 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](#).

## General Specifications

Operating Frequency Band	1710 – 2180 MHz   698 – 896 MHz
Antenna Type	Small Cell
Band	Multiband
Internal GPS frequency band	1575.42 MHz
Internal GPS VSWR	2.0
Performance Note	Outdoor usage

## Mechanical Specifications

<b>RF Connector Quantity, total</b>	2
<b>RF Connector Interface</b>	7-16 DIN Female
<b>Color</b>	Light gray
<b>GPS Connector Interface</b>	4.1-9.5 DIN Female
<b>GPS Connector Quantity</b>	1
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Radome Material</b>	ASA, UV stabilized
<b>Reflector Material</b>	Aluminum
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, diplexed low and high bands</b>	2
<b>Wind Loading, frontal</b>	121.0 N @ 150 km/h 27.2 lbf @ 150 km/h
<b>Wind Loading, maximum</b>	121.0 N @ 150 km/h 27.2 lbf @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   150 mph

## Dimensions

<b>Length</b>	728.0 mm   28.7 in
<b>Outer Diameter</b>	305.0 mm   12.0 in
<b>Net Weight, without mounting kit</b>	11.5 kg   25.4 lb

## Packed Dimensions

<b>Length</b>	998.0 mm   39.3 in
<b>Width</b>	427.0 mm   16.8 in
<b>Depth</b>	407.0 mm   16.0 in
<b>Shipping Weight</b>	16.2 kg   35.7 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



## \* Footnotes

### **Performance Note**

Severe environmental conditions may degrade optimum performance