

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, 2023

Replaced By:

VVSSP-180HS-F2 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 high bands	2
RF Connector Quantity, total	2

Dimensions

Length 728 mm | 28.661 in

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Net 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, 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, 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

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

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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

Regulatory Compliance/Certifications

Agency	Classification
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



* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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