NNVVSSP-360S-FM

14-port quasi-omni antenna, 4x 698–896, 4x 1695–2690, 4x 3400-3800 and 2x 5150-5925 MHz, 360° horizontal beamwidth. Fixed and manual tilt.

General Specifications

Antenna Type	Small Cell
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
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	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	10
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	14

Dimensions

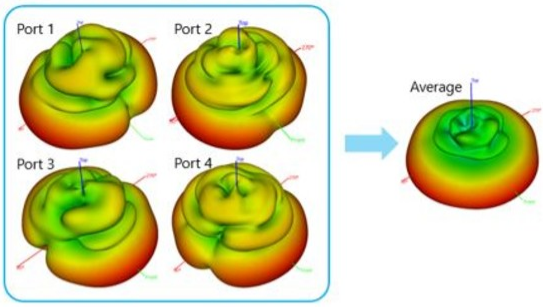
Length	730 mm | 28.74 in
Net Weight, without mounting kit	12.1 kg | 26.676 lb
Outer Diameter	305 mm | 12.008 in

5 GHz Port Power Table

5 GHz FCC Power Requirements				
U-NII Band	**U-NII 1**	**U-NII 2A**	**U-NII 2C**	**U-NII 3**
Frequency (MHz)	**5150 - 5250**	**5250 - 5350**	**5470 - 5725**	**5725 - 5850**
Max Input power per port to align with FCC Title 47 Part 15 (Watts)	**0.5**	**0.125**	**0.125**	**0.5**

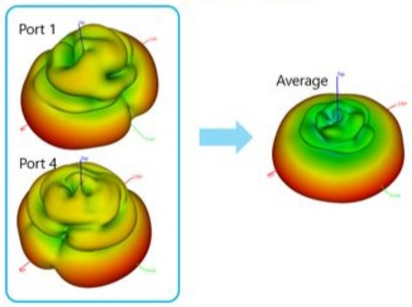
Port Configuration

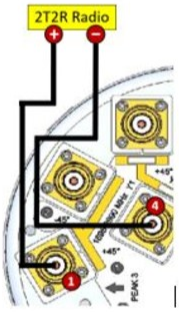
4X Port Configuration:



- When using a 4T4R radio, use ports 1 – 4 of the pattern diversity antenna

2X Port Configuration:





- When using a 2T2R radio, use ports 1 & 4 of the pattern diversity antenna
- Using ports 2 & 3 yields the same result
- This ensures that both orientations and both polarizations are used
- When using this antenna in 2T2R, then this antenna does not have full polarization diversity

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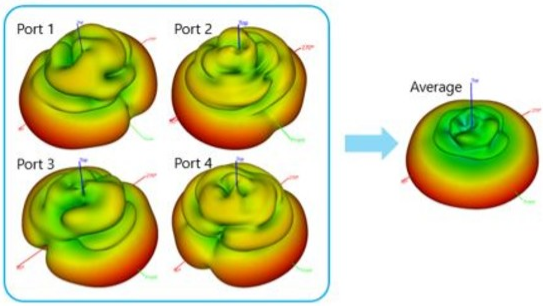
4X Port Configuration:



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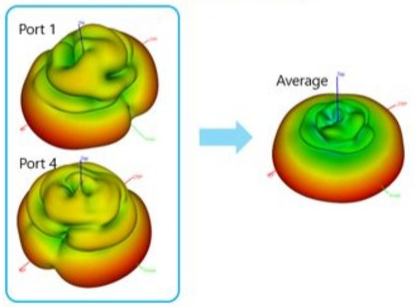

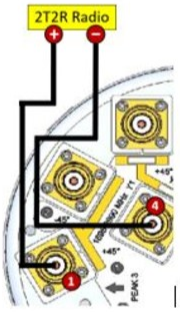

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 3400 – 3800 MHz | 5150 – 5925 MHz | 698 – 896 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	**698–806**	**806–896**	**1695–1920**	**1920–2180**	**2300–2690**	**3400–3800**	**5150–5925**
Gain, dBi	5.1	5.1	7.1	7.8	8.3	6.7	4
Beamwidth, Horizontal, degrees	360	360	360	360	360	360	360
Beamwidth, Vertical, degrees	62.3	55.1	19.2	16.9	14.3	38.2	20.9
Beam Tilt, degrees	0	0	5–15	5–15	5–15	0	0
Isolation, Cross Polarization,	25	25	25	25	25	25	25

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dB							
Isolation, Inter-band, dB	25	25	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	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-150		
Input Power per Port at 50°C, maximum, watts	75	75	75	75	75	35	5

Mechanical Specifications

Wind Loading @ Velocity, frontal	122.0 N @ 150 km/h (27.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	122.0 N @ 150 km/h (27.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	122.0 N @ 150 km/h (27.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	418 mm | 16.457 in
Depth, packed	404 mm | 15.906 in
Length, packed	1000 mm | 39.37 in
Weight, gross	16.7 kg | 36.817 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
ROHS	Compliant
UK-ROHS	Compliant

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance