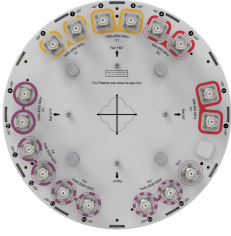


NNVVS4-360S-BF2



16-port small cell antenna, 4x 698-896, 4x 1695-2690 and 8x Beamforming 3300- 4000, 360° Horizontal Beamwidth, fixed tilt.

- Two broadband low band arrays (Bands 12/13/29/14/5) with 4T4R (4X MIMO) capability
- Two broadband mid band arrays (Bands 25/66/30/40/41) with 4T4R (4X MIMO) capability
- 8T8R omni beamforming array with calibration port for 3.5 GHz (Bands 48, 77, 78)

General Specifications

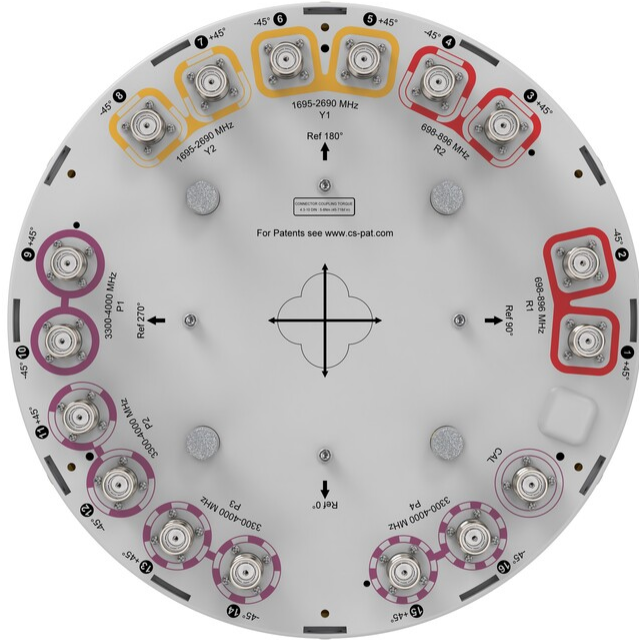
Antenna Type	Small Cell
Band	Multiband
Calibration Connector Interface	4.3-10 Female
Calibration Connector Quantity	1
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA
Radiator 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	8
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

Dimensions

Length	610 mm 24.016 in
Net Weight, antenna only	14.8 kg 32.628 lb
Outer Diameter	370 mm 14.567 in

Port Configuration

NNVVS4-360S-BF2



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3300 – 4000 MHz 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2	P1-P4	P1-P4	P1-P4
Frequency Band, MHz	698-806	806-896	1695-1920	1920-2180	2300-2360	2360-2690	3300-3550	3550-3700	3700-4000
RF Port	1-4	1-4	5-8	5-8	5-8	5-8	9-16	9-16	9-16
Gain, dBi	5.3	5.5	7.8	8.3	8.8	8.6	8.3	8.8	8.8
Beamwidth, Horizontal, degrees	360	360	360	360	360	360	360	360	360
Beamwidth, Vertical,	45.9	42	21	18.2	16.4	15.6	9.5	9	8.5

NNVVS4-360S-BF2

degrees

Beam Tilt, degrees	2	2	2	2	2	2	2	2	2
Coupling level, Amp, Antenna port to Cal port, dB							26	26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB							±2	±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB							1	1	1
Coupler, max Phase Δ, Antenna port to Cal port, degrees							10	10	10
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	100	100	100	100	100	100	75	75	75

Electrical Specifications, Service Beam

Frequency Band, MHz	3300-3550	3550-3700	3700-4000
Steered 0° Gain, dBi	12.1	12.2	12.3
Steered 0° Beamwidth, Horizontal, degrees	63	63	61

Electrical Specifications, Broadcast 360°

Frequency Band, MHz	3300-3550	3550-3700	3700-4000
Gain, dBi	8.5	8.5	8.7
Beamwidth, Horizontal at 3 dB, degrees	360	360	360
Beamwidth, Vertical, degrees	9.6	8.7	8

Mechanical Specifications

Wind Loading @ Velocity, frontal	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)

NNVVS4-360S-BF2

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

Width, packed 478 mm | 18.819 in

Depth, packed 464 mm | 18.268 in

Length, packed 894 mm | 35.197 in

Weight, gross 19 kg | 41.888 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance