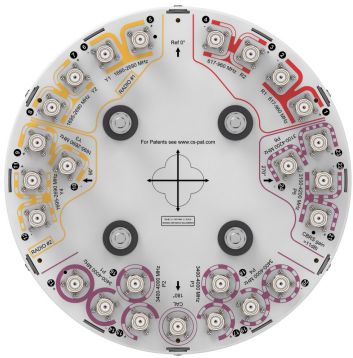


KKV4S4SS-360A-BF



24-port small cell antenna, 4x 617-960, 8x 1695-2690, 8x 3400-4000 MHz beamformer, 4x 3100-4200 MHz, 360° Horizontal Beamwidth, fixed tilt.

- Array configuration provides capability for 4T4R (4X MIMO) on Low Band, dual 4T4R (4X MIMO) on Mid Band and 4T4R (4X MIMO) on High Band
- 8T8R omni beamforming array with calibration port for 3.5 GHz (Bands 48, 77, 78)

General Specifications

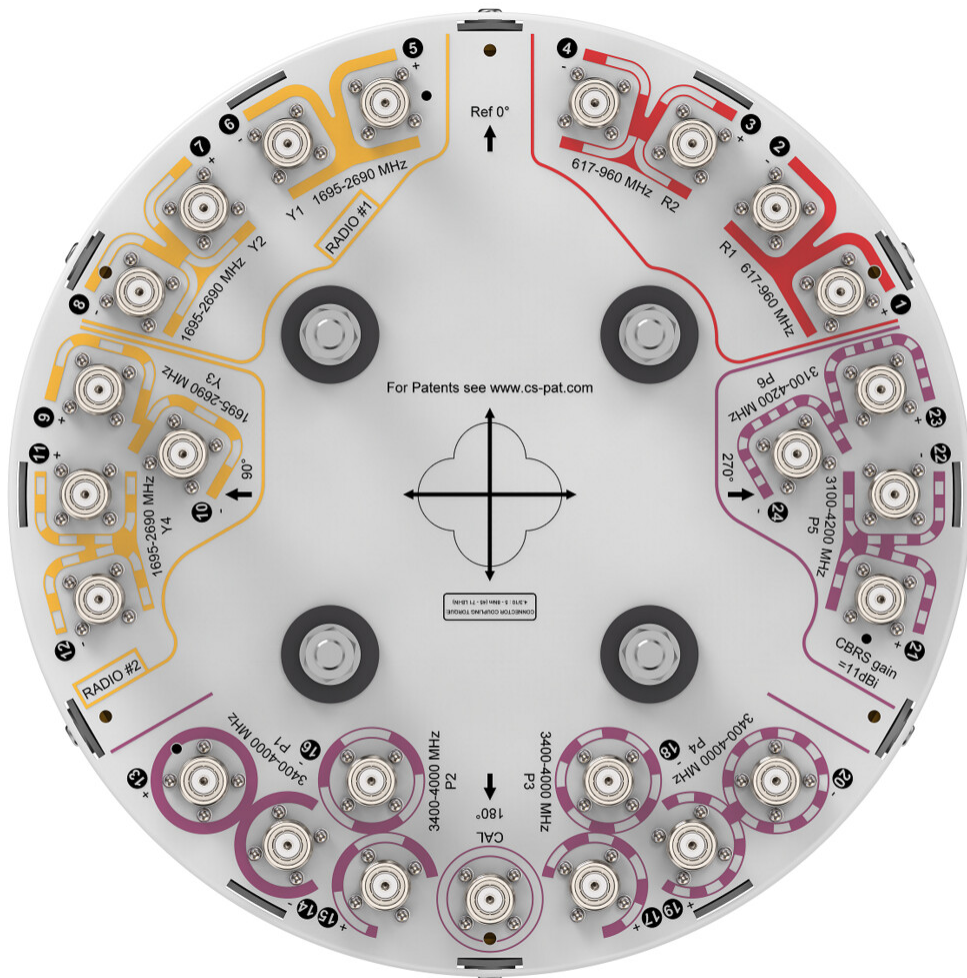
Antenna Type	Small Cell
Band	Multiband
Calibration Connector Interface	4.3-10 Female
Calibration Connector Quantity	1
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	12
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	24

Dimensions

Length	1574 mm 61.969 in
Net Weight, antenna only	35.5 kg 78.264 lb
Outer Diameter	370 mm 14.567 in

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3100 – 4200 MHz 3400 – 4000 MHz 617 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,440 W

Electrical Specifications

	R1,R2	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	617-694	694-806	806-896	896-960	1695-1880	1850-1990	1920-2200	2300-2500	2496-2690
RF Port	1-4	1-4	1-4	1-4	5-12	5-12	5-12	5-12	5-12
Beamwidth, Horizontal, degrees	360	360	360	360	360	360	360	360	360

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Beamwidth, Vertical, degrees	26.3	22.3	19.2	19.1	7.8	7.2	6.7	5.7	5.2
Beam Tilt, degrees	10	10	10	10	0	0	0	0	0
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	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	150	150	150	150	150	150	150	150	150

Electrical Specifications, BASTA

Frequency Band, MHz	617-694	694-806	806-896	896-960	1695-1880	1850-1990	1920-2200	2300-2500	2496-2690
Gain by all Beam Tilts, average, dBi	6.7	6.6	6.2	6.3	11.1	11.6	12.1	12.5	11.5
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.7	±0.6	±0.6	±0.6	±0.6	±0.8	±1	±0.6
Beamwidth, Vertical Tolerance, degrees	±1.4	±2.2	±1.1	±1.4	±0.6	±0.3	±0.4	±0.6	±0.3

Electrical Specifications

	P1-P4	P1-P4	P1-P4	P5-P6	P5-P6	P5-P6
Frequency Band, MHz	3400-3550	3550-3700	3700-4000	3100-3550	3550-3700	3700-4200
RF Port	13-20	13-20	13-20	21-24	21-24	21-24
Beamwidth, Horizontal, degrees	360	360	360	360	360	360
Beamwidth, Vertical, degrees	7.7	7.3	6.8	12.8	11.8	10.8
Beam Tilt, degrees	0	0	0	0	0	0
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,	10	10	10			

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degrees

Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
Isolation, Co-polarization, dB	15	15	15			
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
PIM, 3rd Order, 2 x 20 W, dBc	-145	-145	-145	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	100	100	100	100	100	100

Electrical Specifications, BASTA

Frequency Band, MHz	3400-3550	3550-3700	3700-4000	3100-3550	3550-3700	3700-4200
Gain by all Beam Tilts, average, dBi	9.6	10.8	11.1	9.5	9.8	9.9
Gain by all Beam Tilts Tolerance, dB	±0.8	±0.5	±0.8	±0.8	±0.7	±0.7
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.3	±0.5	±0.8	±0.8	±1.1

Electrical Specifications, Service Beam

Frequency Band, MHz	3400-3550	3550-3700	3700-4000
Steered 0° Gain, dBi	14.6	15.8	16
Steered 0° Beamwidth, Horizontal, degrees	64	52	48

Electrical Specifications, Broadcast 360°

Frequency Band, MHz	3400-3550	3550-3700	3700-4000
Gain, dBi	9.6	10.6	11.2
Beamwidth, Horizontal at 3 dB, degrees	360	360	360
Beamwidth, Vertical, degrees	7.7	7.2	6.8

Mechanical Specifications

Wind Loading @ Velocity, maximum	351.0 N @ 150 km/h (78.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	478 mm 18.819 in
Depth, packed	464 mm 18.268 in
Length, packed	1935 mm 76.181 in
Weight, gross	43.5 kg 95.901 lb

Regulatory Compliance/Certifications

Agency

ISO 9001:2015



Classification

Designed, manufactured and/or distributed under this quality management system

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance