

14-Port Omni Antenna
Frequency Range
Dual Polarization
HPBW
Fixed Electr. DT

R1-R2	Y1-Y2	P1-P2	O1
698-894	1695-2690	3550-3700	5150-5925
X	X	X	X
360°	360°	360°	360°
0°	0°	10°	12°

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14-Port 698–894/1695–2690/3550–3700/5150–5925 360°/360°/360°/360°
 3.3/3.3/6.7/6.6/5.8/5.8/4.0dBi 0°/0°/10°/12°

Type No.	84010557	84010558
Radome color	Brown	Grey

Specifications		R1, connector 1–2		R2, connector 3–4	
		698–894		698–894	
Frequency range	MHz	698–806	824–894	698–806	824–894
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	2x 3.1 +/-0.4	2x 3.5 +/-0.4	2x 3.0 +/-0.5	2x 3.6 +/-0.5
Horizontal Pattern:					
Half-power beamwidth	°	360 (with 1-5 dB nulls, typical)		360 (with 1-5 dB nulls, typical)	
Vertical pattern:					
Half-power beamwidth	°	66 +/-6	57 +/-2	62 +/-4	60 +/-3
Electrical tilt	°	0, fixed	0, fixed	0, fixed	0, fixed
Impedance	Ω	50			
VSWR		< 1.5			
Isolation	Intrasystem Intersystem	> 23 > 28 (R1 // Y1, Y2, Y3, Y4, Y5) > 28 (R2 // Y1, Y2, Y3, Y4, Y5) > 20 (R2 // R1)		> 23 > 28 (R1 // Y1, Y2, Y3, Y4, Y5) > 28 (R2 // Y1, Y2, Y3, Y4, Y5) > 20 (R2 // R1)	
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)			
Max. power per input	W	125 (at 50°C ambient temperature)			

Values based on NGMN-P-BASTA (version 9.6) requirements.

Specifications		Y1, connector 5-6			
		1695–2690			
Frequency range	MHz	1695–1850	1850–2200	2300–2360	2490–2690
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	5.8 +/-0.2	6.8 +/-0.2	6.8 +/-0.2	7.2 +/-0.2
Horizontal Pattern:					
Half-power beamwidth	°	360 with -10 dB null, typical	360 with -10 dB null, typical	360 with -10 dB null, typical	360 with -10 dB null, typical
Vertical pattern:					
Half-power beamwidth	°	35 +/-2	26 +/-2	26 +/-1	25 +/-1
Electrical tilt	°	0	0	0	0
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	> 23 > 28	> 23 > 28	> 23 > 28	> 23 > 28
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)			
Max. power per input	W	150 (at 50°C ambient temperature)			

Values based on NGMN-P-BASTA (version 9.6) requirements.

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All specifications are subject to change without notice.
 The latest specifications are available at www.kathreinusa.com

Specifications		Y2, connector 7-8			
		1695–2690			
Frequency range	MHz	1695–1850	1850–2200	2300–2360	2490–2690
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	5.8 +/-0.2	6.3 +/- 0.5	7.2 +/-0.3	7.0 +/-0.2
Horizontal Pattern:					
Half-power beamwidth	°	360 with -10 dB null, typical	360 with -10 dB null, typical	360 with -10 dB null, typical	360 with -10 dB null, typical
Vertical pattern:					
Half-power beamwidth	°	34 +/-2	31 +/--1	25 +/--1	27 +/--1.5
Electrical tilt	°	0	0	0	0
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB	> 23 > 28	> 23 > 28	> 23 > 28
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)			
Max. power per input	W	150 (at 50°C ambient temperature)			

Values based on NGMN-P-BASTA (version 9.6) requirements.

Specifications		P1, connector 9-10	P2, connector 11-12
Frequency range	MHz	3550–3700	3550–3700
Polarization		+45, -45	+45, -45
Gain	dBi	5.8 +/-0.1	5.8 +/-0.5
Horizontal Pattern:			
Half-power beamwidth	°	360 with -15 dB null, typical	360 with -15 dB null, typical
Vertical pattern:			
Half-power beamwidth	°	27.5 +/-2.5	28 +/-0.5
Electrical tilt	°	9 +/--1.5	11 +/--2
Impedance	Ohms	50	50
VSWR		< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB	> 22 > 28
Intermodulation IM3	dBc	N/A	N/A
Max. power per input	W	100 (at 50°C ambient temperature)	100 (at 50°C ambient temperature)

Values based on NGMN-P-BASTA (version 9.6) requirements.

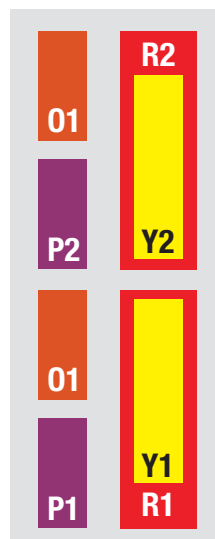
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Specifications			O1, connector 13-14				
Frequency range	MHz		5150—5925				
			5150—5350	5350—5470	5470—5725	5725—5850	5850—5925
Polarization			+45, -45				
Gain	dBi		4.2+/-0.4	3.9 +/-0.7	3.9+/-0.8	4.0 +/-0.7	3.9+/-0.1
Horizontal Pattern:							
Half-power beamwidth	°		360 with -15 dB null, typical				
Vertical pattern:							
Half-power beamwidth	°		32 +/-1	28 +/-1	27 +/-1	27 +/-9	32 +/-9
Electrical tilt	°		12 +/-5				
Impedance	Ohms		50				
VSWR			< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB dB	> 27 > 28				
Intermodulation IM3		dBc	N/A				
Max. power per input		W	2 (at 50°C ambient temperature)				
Max. Input Power per Radio*		W	1	—	—	—	—

Values based on NGMN-P-BASTA (version 9.6) requirements.

*To comply with EIRP restrictions for FCC Title 47 part 15 for fixed outdoor point to multi-point applications.



Mechanical specifications		
Input		14 x 4.3-10 connector female
Connector position		Bottom
Weight	kg lb	18 40
Wind load (at Rated Wind Speed: 150km/h)	N lbf	138 32
Max. wind velocity	km/h mph	242 150
Mechanical interface		Hex nut (requires a 1-1/2" wrench) Torque setting: 122 Nm 90 lbf-ft
Packing size	mm inches	755 x 480 x 480 29.7 / 18.9 / 18.9
Height / diameter	mm inches	626 / 407 24.6 / 16

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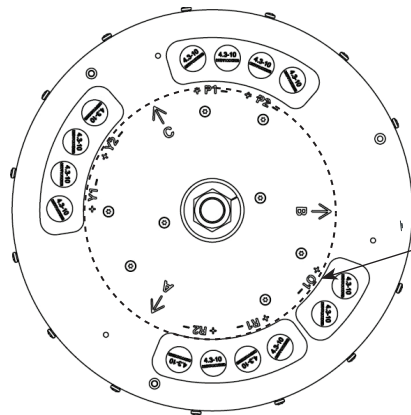
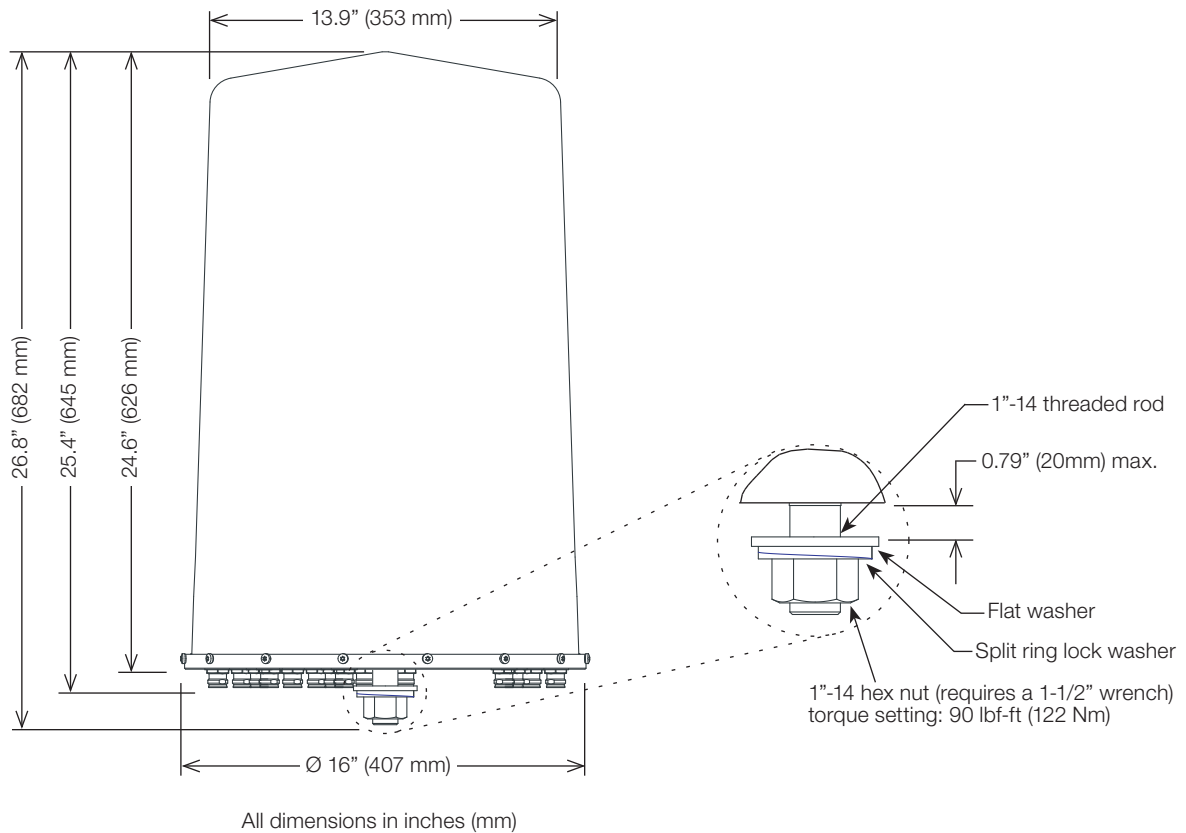
Accessories

General Information

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Antenna area: Reflector screen: Aluminum.
 Radiator: Tin plated zinc.
 Cylindrical fiberglass radome: The max. radome diameter is 407mm (16").
 Fiberglass material guarantees optimum performance with regards to stability, stiffness, UV resistance and painting.
 Radome color 84010557: Brown.
 Radome color 84010558: Grey.

Mounting: Designed to be mounted on top of a utility pole using a custom mounting bracket supplied by the customer.



Canister Pole Mounting Kits

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Kathrein offers a series of pole mounting kits for Kathrein canister antennas. Mounting kits are available to secure Kathrein antennas to the top of existing wood, metal, or concrete poles. These mounts are engineered to support these 2' tall, multi-band antennas in extreme environments. Depending on the type of pole the antenna is being mounted to, the Kathrein pole mount kits come in two different colors (brown or gray).

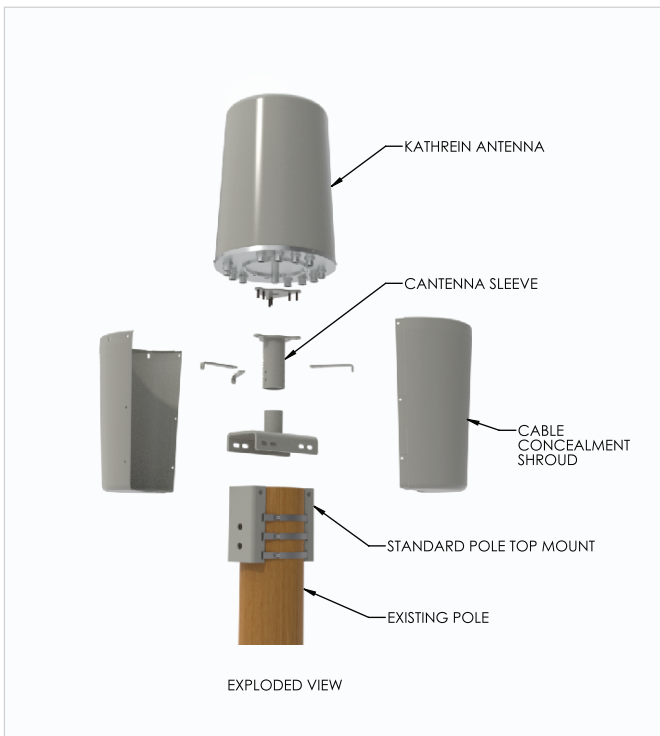
Kathrein Number	Color	Pole Diameter
84040600	Brown	Standard
84040601	Gray	Standard

Standard Pole Diameter is defined as 5.00" to 8.37"

Kathrein Number	Color	Pole Diameter
84040602	Brown	Wide
84040603	Gray	Wide

Wide Pole Diameter is defined as 5.25" to 14.12"

Standard Size Pole



Wide Diameter Pole



All kits include the pole top mount brackets, antenna sleeve, and cable concealment shroud.

Kathrein recommends using the standard pole top mount when possible due to the decreased shroud and mount size. The smaller size provides for better aesthetics.

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