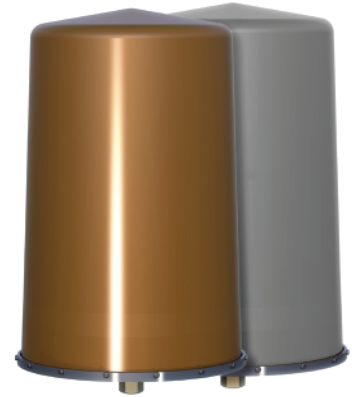


24-Port Omni Antenna
Frequency Range
Dual Polarization
HPBW
Fixed Electr. DT

Y1,Y4	Y2,Y5	Y3,Y6	P1,P3	P2,P4	O1,O2
1695-2690	1695-2690	1695-2690	3400-4200	3400-4200	5150-5925
X	X	X	X	X	X
360°	360°	360°	360°	360°	360°
4°	6°	4°	8°	8°	0°



24-Port 1695-2690/1695-2690/1695-2690/3400-4200/3400-4200/5150-5925
 360/360/360/360/360/360
 9/9/9/7/7/5
 4/6/4/8/8/0

Type No.	84010601	84010602
Radome color	Brown	Grey

Specifications		Y1, connector 1-2 Y4, 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	7.8±0.3	8.0±0.1	8.5±0.1	8.9±0.3
Horizontal Pattern:					
Half-power beamwidth	°	360 with -9 dB null, typical	360 with -10 dB null, typical	360 with -11 dB null, typical	360 with -14 dB null, typical
Vertical pattern:					
Half-power beamwidth	°	21±1	18±1	16±1	14±0
Electrical tilt	°	7±1	6±1	5±1	3±1
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB > 25 > 20	> 25 > 20	> 25 > 26	> 25 > 25
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.

To have better performance in 4X4 MIMO, Kathrein recommends that one uses the Y1 & Y4 (four connectors) as one set of MIMO.

Specifications		Y2, connector 3-4 Y5, connector 9-10			
		1695–2690			
Frequency range	MHz	1695–1850	1850–2200	2300–2360	2490–2690
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	7.8±0.3	8.3±0.2	8.9±0.3	8.6±0.2
Horizontal Pattern:					
Half-power beamwidth	°	360 with -9 dB null, typical	360 with -10 dB null, typical	360 with -11 dB null, typical	360 with -14 dB null, typical
Vertical pattern:					
Half-power beamwidth	°	20±1	18±1	16±1	14±1
Electrical tilt	°	8±1	7±1	6±1	4±1
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB	> 25 > 20	> 25 > 20	> 25 > 25
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.

To have better performance in 4X4 MIMO, Kathrein recommends that one uses the Y2 & Y5 (four connectors) as one set of MIMO.

Specifications		Y3, connector 5-6 Y6, connector 11-12			
		1695–2690			
Frequency range	MHz	1695–1850	1850–2200	2300–2360	2490–2690
Polarization		+45, -45	+45, -45	+45, -45	+45, -45
Gain	dBi	7.9±0.4	8.1±0.1	8.6±0.4	8.3±0.1
Horizontal Pattern:					
Half-power beamwidth	°	360 with -9 dB null, typical	360 with -10 dB null, typical	360 with -11 dB null, typical	360 with -14 dB null, typical
Vertical pattern:					
Half-power beamwidth	°	20±1	18±1	15±1	14±1
Electrical tilt	°	8±1	5±1	5±1	3±1
Impedance	Ohms	50	50	50	50
VSWR		< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem	dB	> 25 > 20	> 25 > 26	> 25 > 25
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.

To have better performance in 4X4 MIMO, Kathrein recommends that one uses the Y3 & Y6 (four connectors) as one set of MIMO.

Specifications		P1, connector 13-14	P3, connector 17-18
Frequency range	MHz	3400–3700	3700-4200
Polarization		+45, -45	+45, -45
Gain	dBi	6.9±0.2	7.0±0.1
Horizontal Pattern:			
Half-power beamwidth	°	360 with -15 dB null, typical	360 with -15 dB null, typical
Vertical pattern:			
Half-power beamwidth	°	22.5±0.5	22.5±1.5
Electrical tilt	°	9±2	7±2
Impedance	Ohms	50	50
VSWR		< 1.5	< 1.5
Isolation	Intrasystem	> 23	> 23
	Intersystem	> 28	> 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.

To have better performance in 4X4 MIMO, Kathrein recommends that one uses the P1 & P3 (four connectors) as one set of MIMO.

Specifications		P2, connector 15-16 P4, connector 19-20	
Frequency range	MHz	3400—3700	3700-4200
Polarization		+45, -45	+45, -45
Gain	dBi	7.0±0.2	7.1±0.3
Horizontal Pattern:			
Half-power beamwidth	°	360 with -15 dB null, typical	360 with -15 dB null, typical
Vertical pattern:			
Half-power beamwidth	°	23±1.5	23±2
Electrical tilt	°	9±2	7±1
Impedance	Ohms	50	50
VSWR		< 1.5	< 1.5
Isolation	Intrasystem Intersystem	> 23 > 28	> 23 > 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.

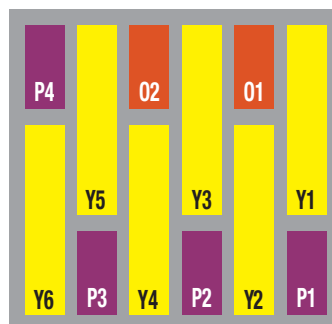
To have better performance in 4X4 MIMO, Kathrein recommends that one uses the P2 & P4 (four connectors) as one set of MIMO.

Specifications		O1, connector 21-22 O2, connector 23-24				
Frequency range	MHz	5150—5350	5350—5470	5470—5725	5725—5850	5850—5925
Polarization		+45, -45				
Gain (typical/maximum)	dBi	4.9/5.9	4.8/5.2	5.0/5.6	4.9/5.5	4.4/4.9
Horizontal Pattern:						
Half-power beamwidth	°	360 with -15 dB null, typical				
Vertical pattern:						
Half-power beamwidth	°	21±0.5	19±1	19±0.5	20±0.5	19±1
Electrical tilt	°	0 +/-1				
Impedance	Ohms	50				
VSWR		< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Isolation	Intrasystem Intersystem					> 25 > 28
Intermodulation IM3	dBc	N/A				
Max. power per input	W	50 (at 50°C ambient temperature)				

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

Maximum Power to comply with EIRP restrictions for FCC Title 47 and Part 15

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 Radio	1	0.25	0.25	1



Mechanical specifications		
Input	24 x 4.3-10 connector female	
Connector position	Bottom	
Weight	kg	22.2
	lb	49.0
Wind load (at Rated Wind Speed: 150km/h)	N	138
	lbf	32
Max. wind velocity	km/h	242
	mph	150
Mechanical interface	Hex nut (requires a 1-1/2" wrench) Torque setting: 122 Nm 90 lbf-ft	
Packing size	mm	755 x 480 x 480
	inches	29.7 / 18.9 / 18.9
Height / diameter	mm	626 / 407
	inches	24.6 / 16

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

84010601, 84010602 2018-R3.2

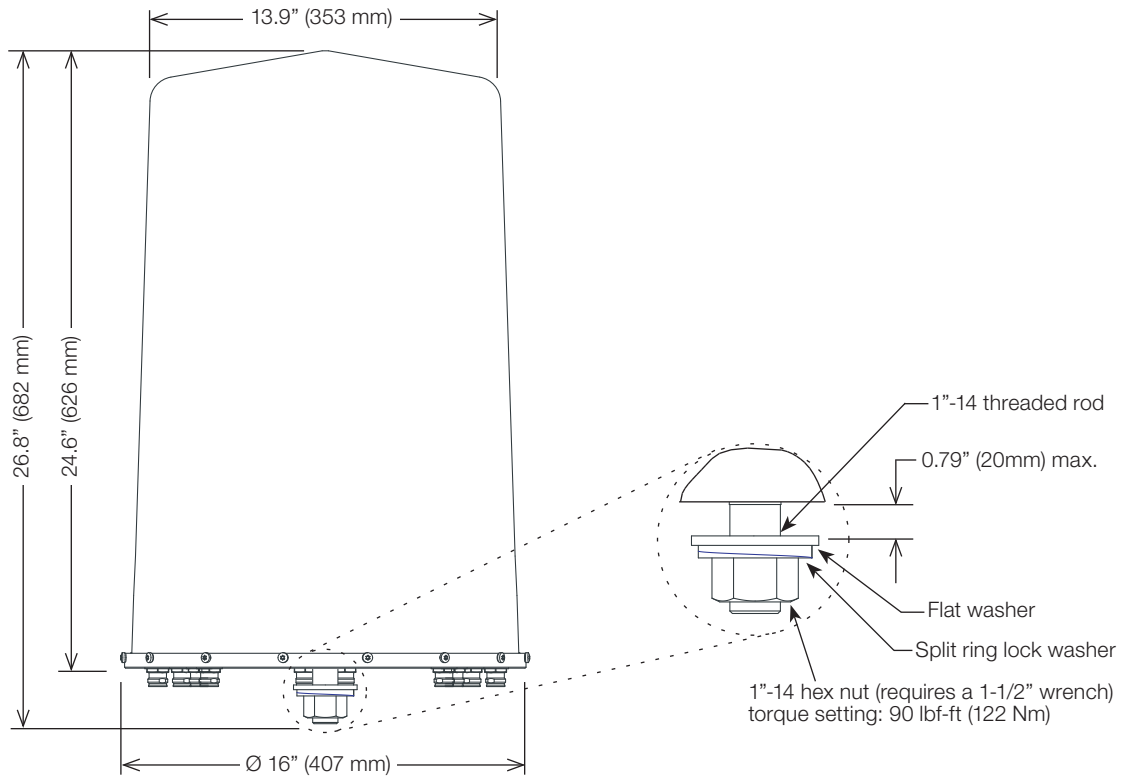
Accessories

General Information

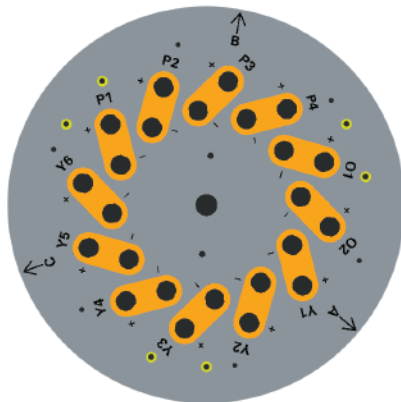
84010601/84010602

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 84010601: Brown.
 Radome color 84010602: Grey.

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



All dimensions in inches (mm)



Consult antenna patterns to determine direction of maximum signal strength per band.
 Reference point "A" corresponds to 0°

Avoid obstructing any drain holes

84010601, 84010602 2018-R3.2

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

Canister Pole Mounting Kits

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).

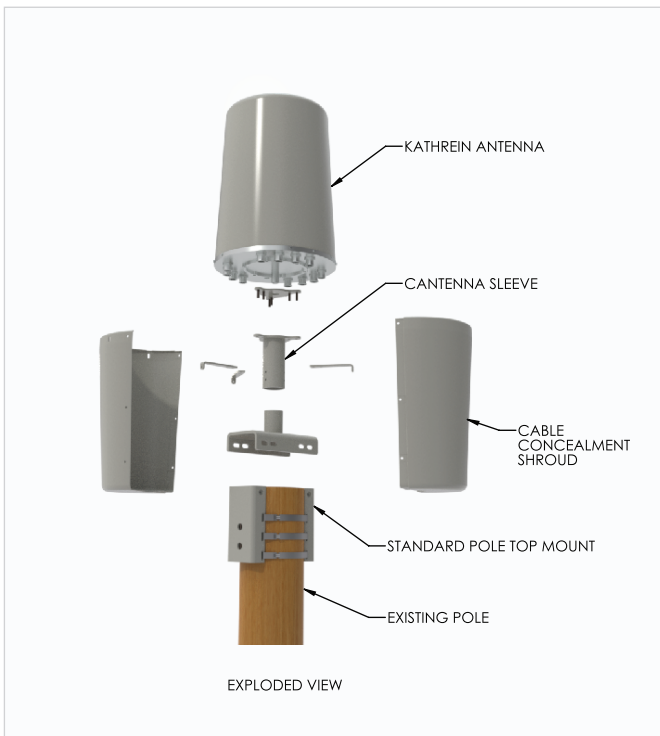
Kathrein Number	Color	Pole Diameter
84040600	Brown	Standard
84040601	Gray	Standard

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.