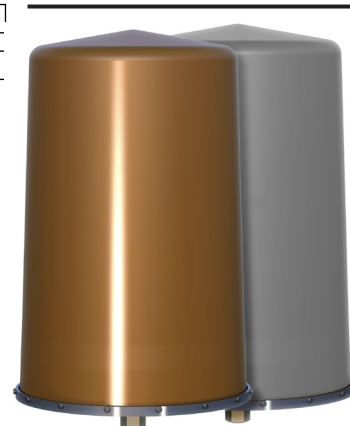


**8-Port Omni Antenna**  
**Frequency Range**  
**Dual Polarization**  
**HPBW**  
**Fixed Electr. DT**

<b>R1</b>	<b>R2</b>	<b>Y1</b>	<b>Y2</b>
698-806	824-894	1695-2690	1695-2690
X	X	X	X
360°	360°	360°	360°
2°	2°	2°	2°

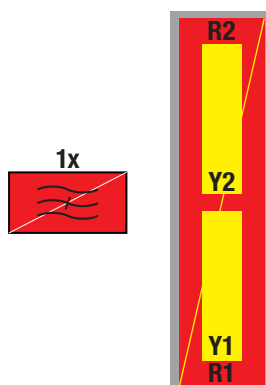
**KATHREIN**



8-Port Omni 698–806/824–894/1695–2690/1695–2690 360°/360°/360°/360°  
 4.5/5.5/6.5/6.5dBi 2°/2°/2°/2°T

Type No.	<b>80010785</b>	<b>80010786</b>
Radome color	Brown	Grey

Lowbands		<b>R1</b>	<b>R2</b>
Frequency range	MHz	698–806	824–894
Polarization	°	+45, -45	+45, -45
Gain	dBi	2x 4.8	2x 5.3
<b>Horizontal Pattern:</b>			
Half-power beam width	°	360 (with 2–10 dB nulls, typical)	360 (with 2–10 dB nulls, typical)
<b>Vertical Pattern:</b>			
Half-power beam width	°	42	36
Electrical tilt	°	2, fixed	2, fixed
Impedance	Ω	50	
VSWR		< 1.5	
Isolation	Intrasystem Intersystem	dB	
		> 25 > 28 (R1 // Y1, Y2) > 28 (R2 // Y1, Y2) > 30 (R2 // R1)	> 25 > 28 (R1 // Y1, Y2) > 28 (R2 // Y1, Y2) > 30 (R2 // R1)
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)	
Max. power per input	W	250 (at 50°C ambient temperature)	



21001d, subject to alteration

All specifications are subject to change without notice.  
 The latest specifications are available at [www.kathreinusa.com](http://www.kathreinusa.com)

80010785, 80010786 Page 1 of 3

Highband		Y1		
		1695–2690		
Frequency range	MHz	1695–2180	2200–2360	2490–2690
Polarization	°	+45, -45	+45, -45	+45, -45
Gain	dBi	2 x 6	2 x 6.4	2 x 6.7
Horizontal Pattern:				
Half-power beam width	°	360 (with 6–16 dB nulls, typical)		
Vertical Pattern:				
Half-power beam width	°	28	27	25
Electrical tilt	°	2, fixed		
Impedance	Ω	50		
VSWR		< 1.5	< 1.5	< 1.65
Isolation	Intrasystem Intersystem	dB	> 23 typ, 27 > 28 (Y1 // R1) > 30 (Y1 // Y2) > 28 (Y1 // R2)	> 22 typ, 24 > 28 (Y1 // R1) > 30 (Y1 // Y2) > 28 (Y1 // R2)
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)		
Max. power per input	W	150 (at 50° C ambient temperature)		

Highband		Y2		
		1695–2690		
Frequency range	MHz	1695–2180	2200–2360	2490–2690
Polarization	°	+45, -45	+45, -45	+45, -45
Gain	dBi	2 x 6	2 x 6.2	2 x 6.4
Horizontal Pattern:				
Half-power beam width	°	360 (with 6–16 dB nulls, typical)		
Vertical Pattern:				
Half-power beam width	°	30	28	26
Electrical tilt	°	2, fixed		
Impedance	Ω	50		
VSWR		< 1.5	< 1.5	< 1.65
Isolation	Intrasystem Intersystem	dB	> 25 typ, 27 > 28 (Y2 // R1) > 30 (Y2 // Y1) > 28 (Y2 // R2)	> 25 typ, 27 > 28 (Y2 // R1) > 30 (Y2 // Y1) > 28 (Y2 // R2)
Intermodulation IM3	dBc	< -153 (2 x 43 dBm carrier)		
Max. power per input	W	150 (at 50° C ambient temperature)		

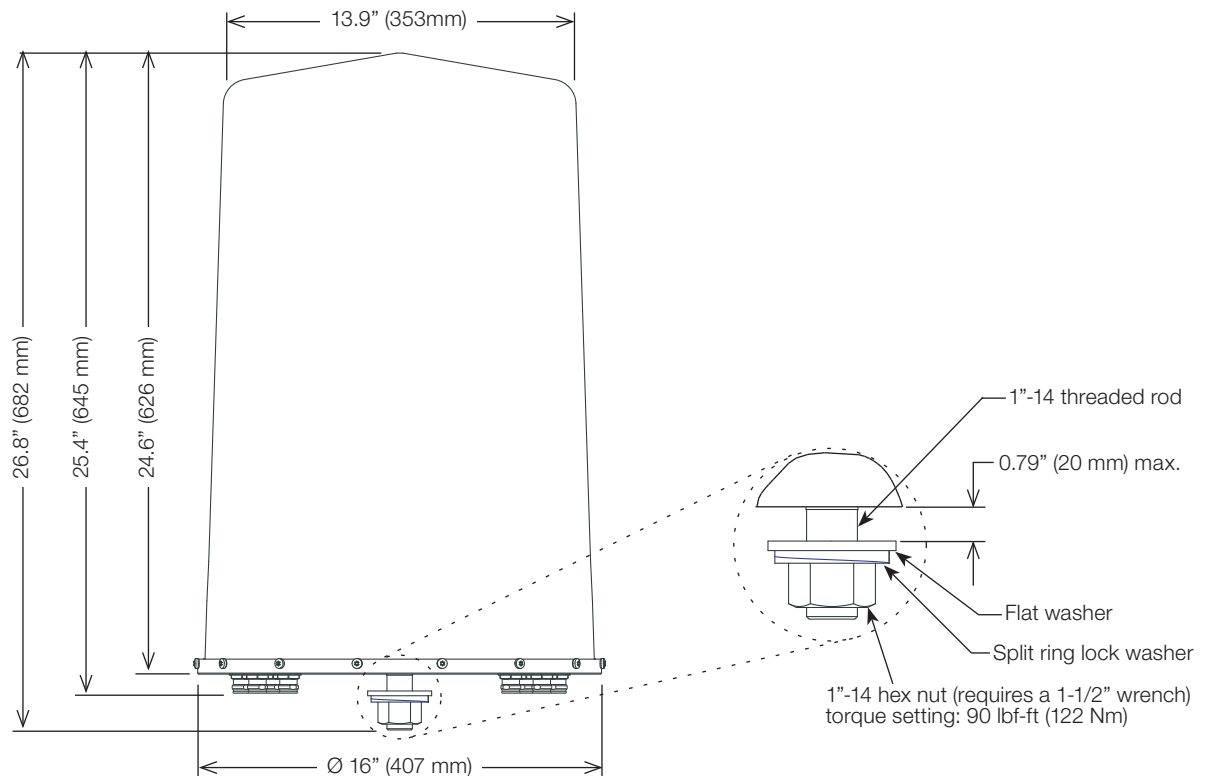
Mechanical specifications		
Input	8 x 4.3-10 connector female	
Connector position	Bottom	
Weight	kg lb	18.6 41
Wind load (at Rated Wind Speed: 150km/h)	N lbf	138 32
Max. wind velocity	km/h mph	242 150
Mechanical interface	Hex nut (requires a 1-1/2" wrench) Torque setting: 122 Nm   90 lbf-ft	
Packing size	mm inches	755 x 480 x 480 29.7 / 18.9 / 18.9
Height / diameter	mm inches	626 / 407 24.6 / 16

21001d, subject to alteration

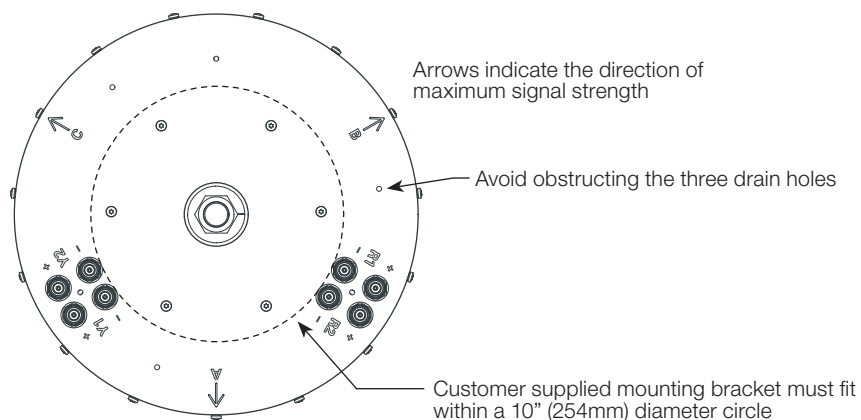
# Accessories

## General Information

- 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 80010785: **Brown**.  
 Radome color 80010786: **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)



21001d, subject to alteration