KATHREIN

840 10515 840 10516

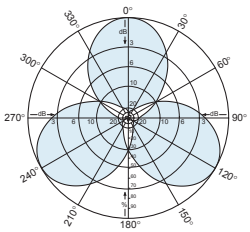
65° Dual Band Tri-sector Antenna with GPS

	Antenna 1	Antenna 2	Antenna 3
Dual Band (MHz)	**698–894 / 1710–2180**	**698–894 / 1710–2180**	**698–894 / 1710–2180**
Dual Polarization	**X**	**X**	**X**
HPBW	**65°**	**65°**	**65°**

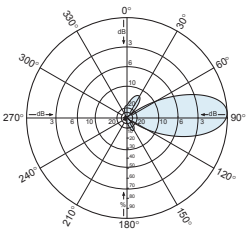
General specifications:

Frequency range	698–894 MHz 1710–2180 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° upper and lower band -45° upper and lower band
Connector	12 x 7-16 DIN female
Isolation intrasystem intersystem	>30 dB >40 dB (698–894 // 1710–2180 MHz)
Radome color	Brown or grey
Weight	50 lb (22.7 kg)
Height	24.6 inches (626 mm)
Radome diameter	16 inches (407 mm)
Wind load Side	at 93 mph (150kph) 32 lbf (138 N)
Wind survival rating*	150 mph (241.4 kph)
Shipping dimensions	32 x 20 x 19 inches (813 x 508 x 483 mm)
Shipping weight	52 lb (23.6 kg)
Mounting	Designed to be mounted on top of a utility pole using a custom mounting bracket supplied by the customer.
See reverse for order information.	

698–894 MHz

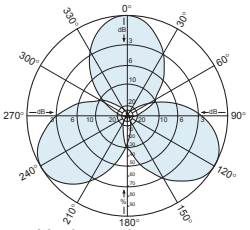


Horizontal pattern
±45°-polarization

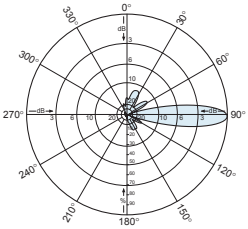


Vertical pattern
±45°-polarization

1710–2180 MHz



Horizontal pattern
±45°-polarization



Vertical pattern
±45°-polarization

GPS specifications:

Frequency range	1575.42 ± 3 MHz
LNA gain	27 dB Typical
Pre-amp filtering	-30 dB at ± 100 MHz
Polarization	Righthand circular
H-plane beamwidth	Omni
E-plane beamwidth	105 degrees (half-power)
Connector	N female
DC power	+3–5.5 Vdc, 22 mA ± 3 Through N output connector
Temperature range	-35° C to +70° C

Specifications:	**698–806 MHz**	**806–894 MHz**	**1710–1880 MHz**	**1850–1990 MHz**	**1920–2180 MHz**
Gain	10.4 dBi	11.6 dBi	13.5 dBi	13.5 dBi	13.2 dBi
Front-to-back ratio (180° ± 30°)	>24 dB (co-polar) >18 dB (total power)	>26 dB (co-polar) >20 dB (total power)	>32 dB (co-polar) >24 dB (total power)	>30 dB (co-polar) >26 dB (total power)	>30 dB (co-polar) >25 dB (total power)
Maximum input power	250 watts (at 50°C)	250 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	71° (half-power)	65° (half-power)	60° (half-power)	62° (half-power)	64° (half-power)
+45° and -45° polarization vertical beamwidth	37° (half-power)	31° (half-power)	19° (half-power)	17.5° (half-power)	17.5° (half-power)
Cross polar ratio Main direction 0° Sector (typical) ±60°	 18 dB >8 dB	 25 dB >8 dB	 20 dB >9 dB	 22 dB >9 dB	 25 dB >12 dB

11204-K

RoHS Lead-Free

* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 19-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.

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

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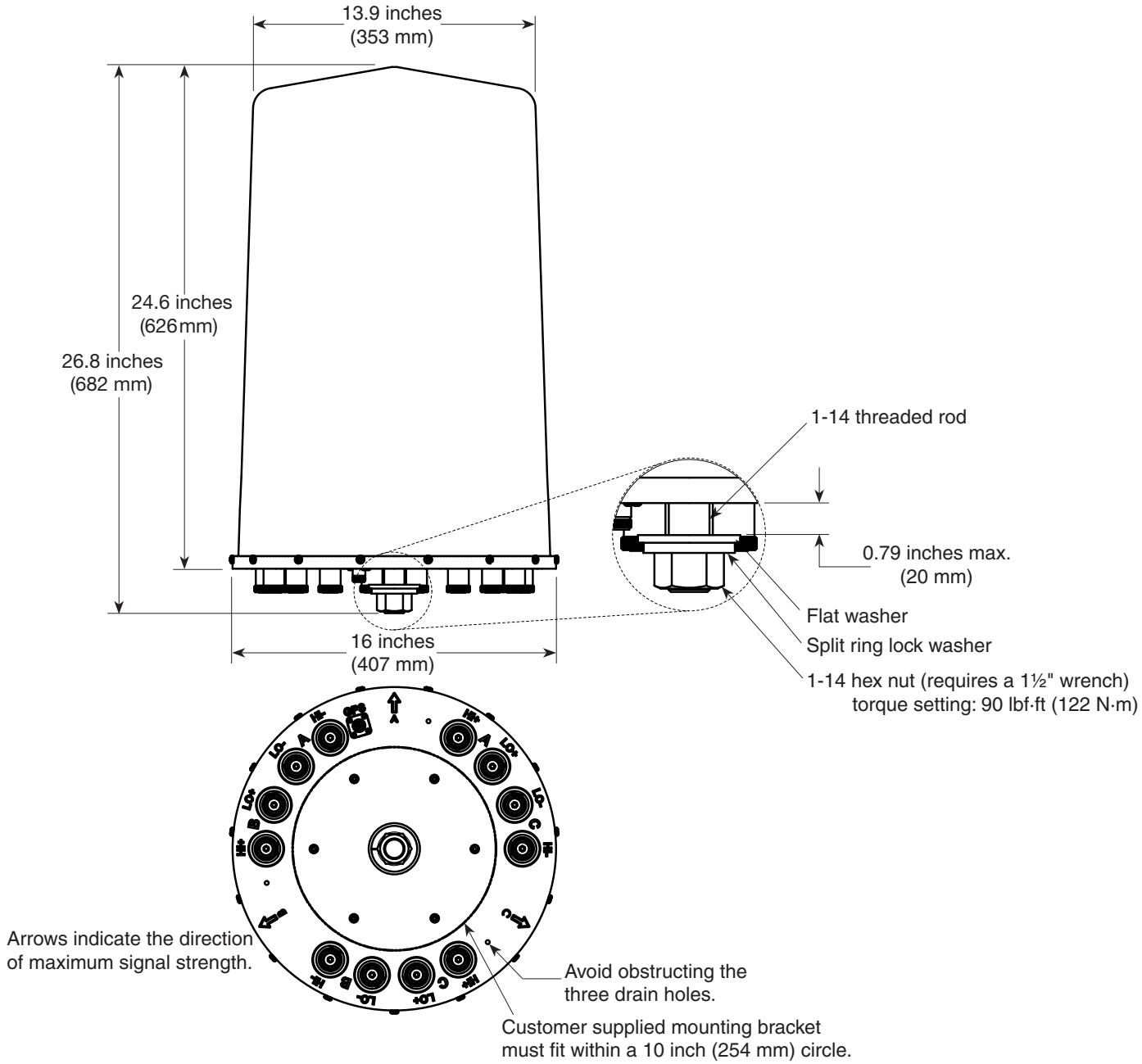

Order Information:

Model	Description
840 10515	Brown Dualband X-pol Trisector Antenna
840 10516	Grey Dualband X-pol Trisector Antenna

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