

Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled downtilt is available as a retrofitable option.

- 0-10° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

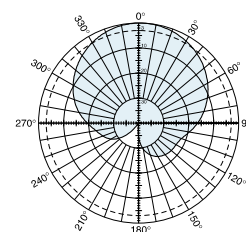
General specifications:

Frequency range	1710–2170 MHz	
Impedance	50 ohms	
VSWR	< 1.4:1	
Intermodulation (2x20w)	IM3: < -150 dBc	
Polarization	+45° and -45°	
Front-to-back ratio	>30 dB (co-polar) >25 dB (total power)	
Maximum input power	300 watts per input (at 50°C)	
Electrical downtilt continuously adjustable	0–10 degrees	
Connector	2 x 7-16 DIN female	
Isolation	>30 dB	
Cross polar ratio		
Main direction	0°	25 dB (typical)
Sector	±60°	>10 dB
Weight	11 lb (5 kg)	
Dimensions	26.1 x 6.1 x 2.7 inches (662 x 155 x 69 mm)	
Wind load	at 93 mph (150kph)	
Front/Side/Rear	41 lbf / 13 lbf / 48 lbf (180 N) / (55 N) / (210 N)	
Wind survival rating*	120 mph (200 kph)	
Shipping dimensions	36.4 x 6.8 x 3.6 inches (924 x 172 x 92 mm)	
Shipping weight	14.3 lb (6.5 kg)	
Mounting	Fixed mount options are available for 2 to 5.7 inch (50 to 145 mm) OD masts.	

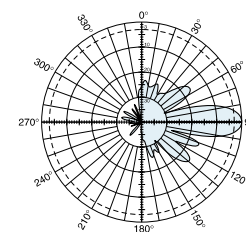
See reverse for order information.

Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	14.7 dBi	15 dBi	15.2 dBi
+45° and -45° polarization horizontal beamwidth	69° (half-power)	67° (half-power)	64° (half-power)
+45° and -45° polarization vertical beamwidth	14.5° (half-power)	14° (half-power)	13° (half-power)
Vertical Pattern–sidelobe suppression for first side-lobe above main beam	0° 4° 8° 10° T 18 16 15 15 dB	0° 4° 8° 10° T 18 18 18 18 dB	0° 4° 8° 10° T 18 18 18 16 dB

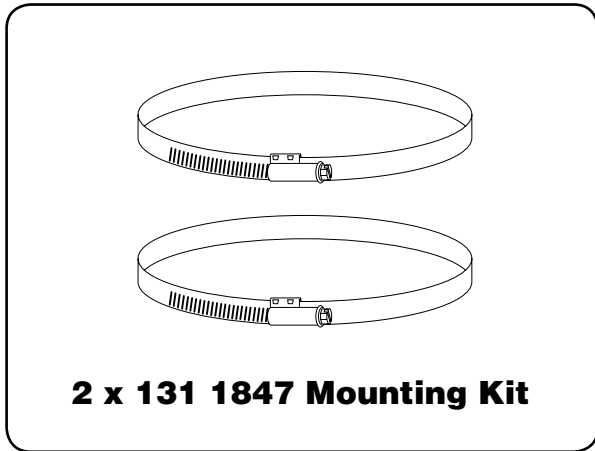
* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



Horizontal pattern
±45° - polarization

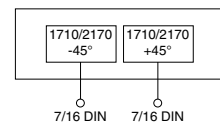
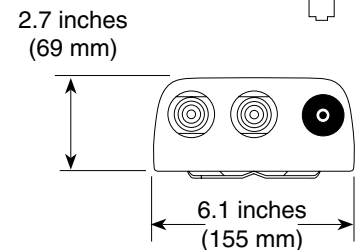
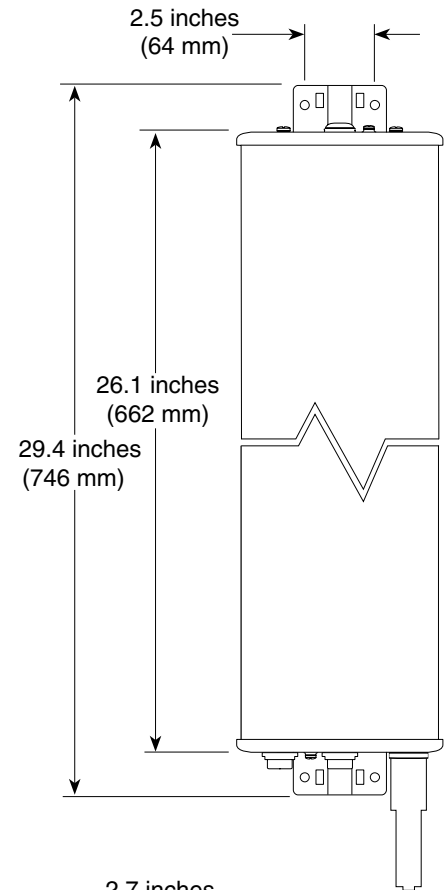


Vertical pattern
±45° - polarization



Mounting Options:

Model	Description
2 x 131 1847 (shown)	Mounting Kit for 2 to 5.7 inch (50 to 145 mm) OD mast.
732 327	Tilt Kit for use with the above mounting kit, 0–20 degrees downtilt angle.
742 263	Three-panel Sector Mounting Kit (120 deg. ea.) for 3.5 inch (89 mm) OD mast.



Order Information:

Model	Description
742 211	Antenna with 7-16 DIN connectors 0°–10° adjustable electrical downtilt

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

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