

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.

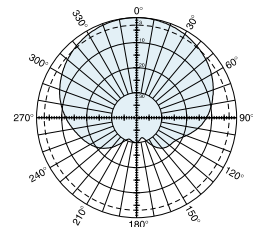
General specifications:

Frequency range	1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>25 dB (co-polar) >25 dB (total power)
Connector	2 x 7-16 DIN female
Isolation	>30 dB
Maximum input power	300 watts (at 50°C) per input
Weight	9.3 lb (4.2 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	36.8 x 6.8 x 3.6 inches (935 x 172 x 92 mm)
Shipping weight	12 lb (5.5 kg)
Mounting	Fixed and tilt mount options are available for 1.2 to 5.3 inch (30 to 135 mm) OD masts.

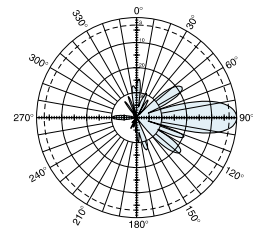
See reverse for order information.

Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	13.7 dBi	14 dBi	14.1 dBi
Horizontal beamwidth	88° (half-power)	88° (half-power)	88° (half-power)
Vertical beamwidth	14.7° (half-power)	14° (half-power)	13° (half-power)
Electrical downtilt continuously adjustable	0°–10° (manual or optional remote control)	0°–10°	0°–10°
Sidelobe suppression for first sidelobe above horizon	0° 4° 8° 10° T 18 18 18 18 dB	0° 4° 8° 10° T 18 18 18 18 dB	0° 4° 8° 10° T 18 18 18 18 dB
Cross polar ratio			
Main direction	0°	20 dB (typical)	20 dB (typical)
Sector	±60°	>10 dB	>10 dB

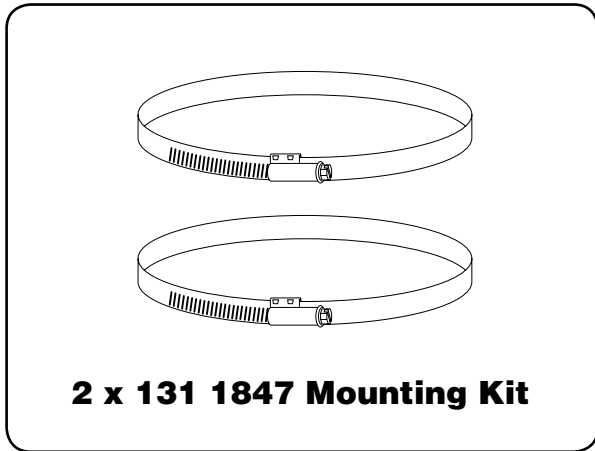
*Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



Horizontal pattern
±45° polarization

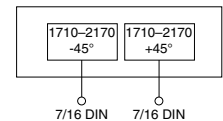
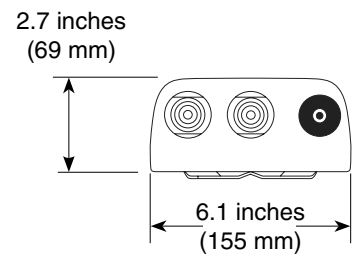
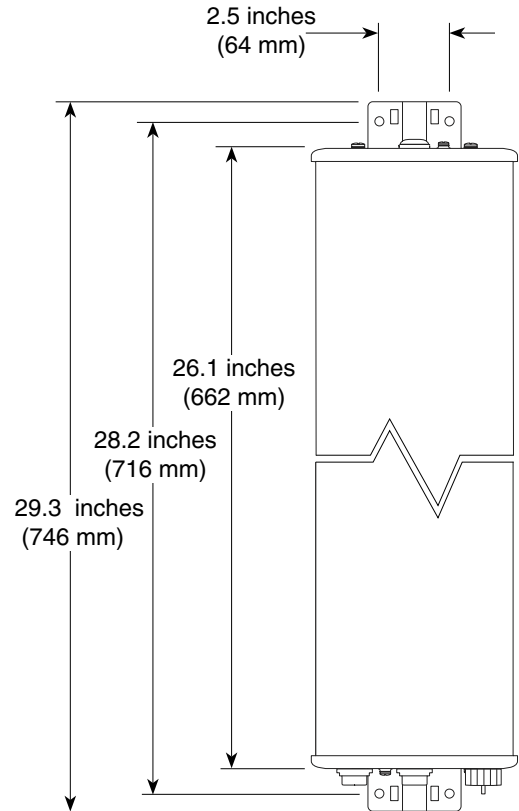


Vertical pattern
±45° polarization



Mounting Options:

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



Order Information:

Model	Description
741 988	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.