

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.

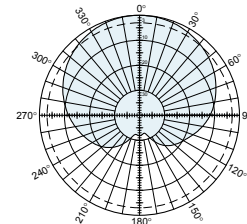
- 0-6° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.

**General specifications:**

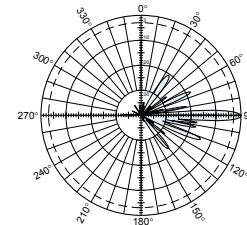
Frequency range	1710–2170 MHz
Impedance	50 ohms
VSWR	< 1.5:1
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>25 dB (co-polar) >25 dB (total power)
Maximum input power	300 watts per input (at 50°C)
Electrical downtilt continuously adjustable	0–6 degrees (manual or optional remote control)
Connector	2 x 7-16 DIN female
Isolation	>30 dB
Cross polar ratio	
Main direction 0°	20 dB (typical)
Sector ±60°	>10 dB
Tracking	0.5 dB
Squint	±2.5°
Weight	24.3 lb (11 kg) 28.7 lb (13.kg) clamps included
Dimensions	76.5 x 6.1 x 2.7 inches (1942 x 155 x 69 mm)
Wind load	at 93 mph (150kph)
Front/Side/Rear	115 lbf / 42 lbf / 138 lbf (510 N) / (185 N) / (610 N)
Mounting category	M (Medium)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	87.2 x 6.8 x 3.6 inches (2214 x 172 x 92 mm)
Shipping weight	30.9 lb (14 kg)
Mounting	Fixed mounts for 2 to 4.6 inch (50 to 115 mm) OD masts are included and tilt options are available.

See reverse for order information.

Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	17.7 dBi	18 dBi	18.2 dBi
+45° and -45° polarization horizontal beamwidth	88° (half-power)	88° (half-power)	88° (half-power)
+45° and -45° polarization vertical beamwidth	4.9° (half-power)	4.7° (half-power)	4.5° (half-power)
Sidelobe suppression for first sidelobe above main beam	0° 2° 4° 6° T 17 17 17 17 dB	0° 2° 4° 6° T 18 18 18 18 dB	0° 2° 4° 6° T 18 18 18 18 dB



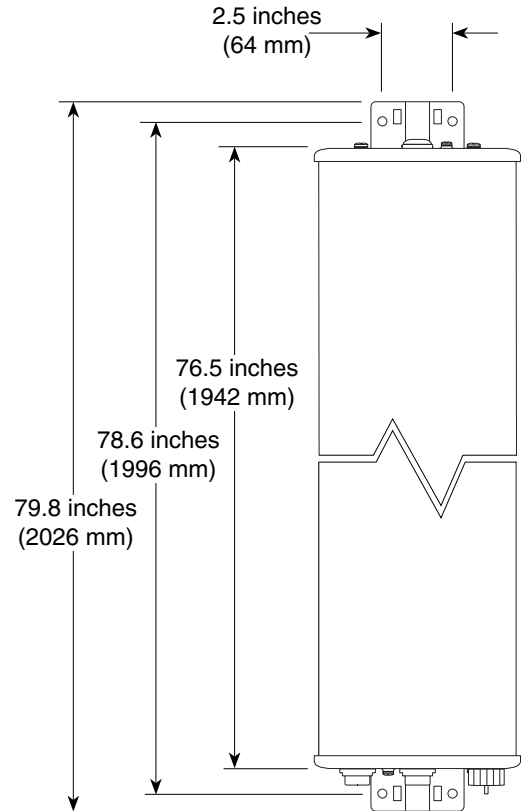
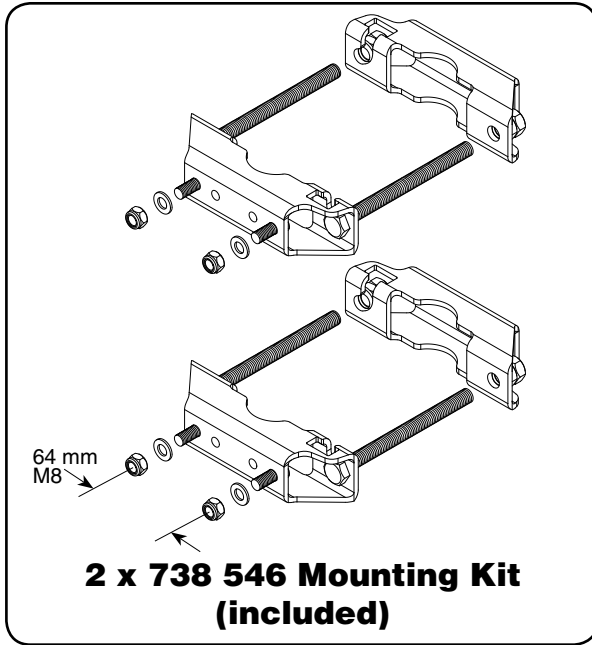
Horizontal pattern  
±45°- polarization



Vertical pattern  
±45°- polarization

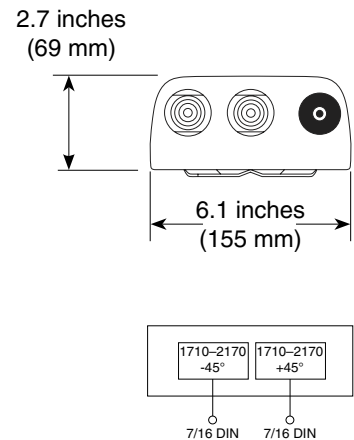


\*Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



**Mounting Options:**

Model	Description
2 x 738 546 (included)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast. 4.4 lb (2 kg)
850 10013	Tilt Kit for use with mounting kit listed above, 0–11 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
741 990V01	Antenna with 7-16 DIN connectors 0°–6° adjustable electrical downtilt

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