

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.

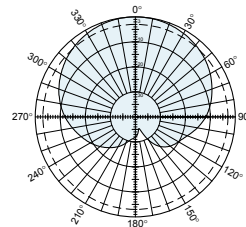
- 0-8° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

General specifications:

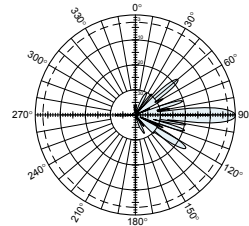
Frequency range	1710–2200 MHz
Impedance	50 ohms
VSWR	< 1.5:1
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Maximum input power	300 watts per input (at 50°C)
Electrical downtilt continuously adjustable	0–8 degrees
Connector	2 x 7-16 DIN female
Isolation	>30 dB
Tracking	0.5 dB
Squint	±2.0°
Weight	16.5 lb (7.5 kg) 20.9 lb (9.5 kg) clamps included
Dimensions	51.3 x 6.1 x 2.7 inches (1302 x 155 x 69 mm)
Wind load	at 93 mph (150kph)
Front/Side/Rear	79 lbf / 29 lbf / 90 lbf (350 N) / (125 N) / (400 N)
Mounting category	M (Medium)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	62 x 6.8 x 3.6 inches (1574 x 172 x 92 mm)
Shipping weight	25.4 lb (11.5 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	1920–2200 MHz
Gain	16.5 dBi	16.8 dBi	16.7 dBi
±45° polarization horizontal beamwidth	88° (half-power)	88° (half-power)	88° (half-power)
±45° polarization vertical beamwidth	7° (half-power)	6.7° (half-power)	6.5° (half-power)
Sidelobe suppression for first sidelobe above main beam	0° 2° 5 8° T 18 18 16 14 dB	0° 2° 5° 8° T 20 20 18 17 dB	0° 2° 5° 8° T 18 18 18 17 dB
Cross polar ratio			
Main direction 0°	20 dB (typical)	20 dB (typical)	20 dB (typical)
Sector ±60°	>10 dB	>10 dB	>10 dB
Front-to-back ratio (180°±30°)	>25 dB (co-polar) >25 dB (total power)	>25 dB (co-polar) >25 dB (total power)	>24 dB (co-polar) >24 dB (total power)



Horizontal pattern
±45°- polarization



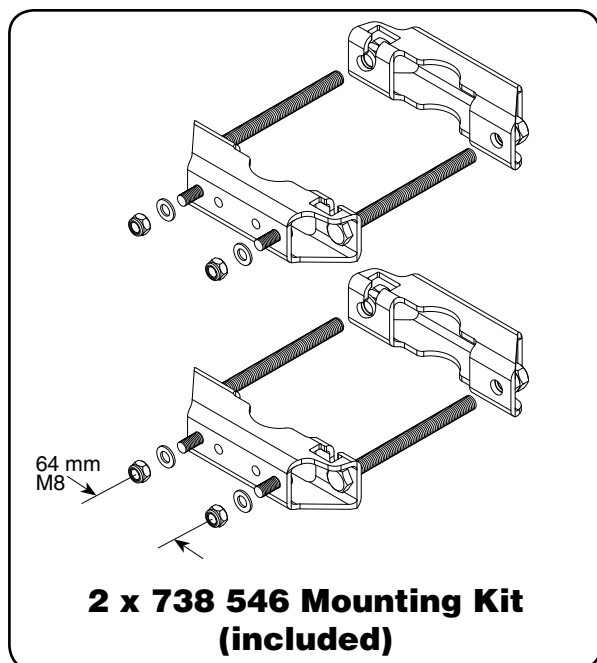
Vertical pattern
±45°- polarization
0°–8° electrical downtilt



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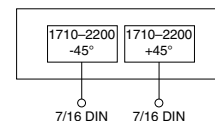
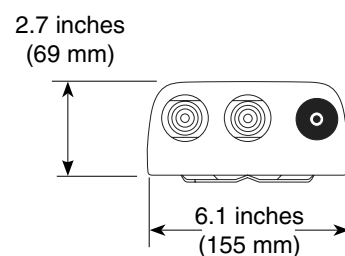
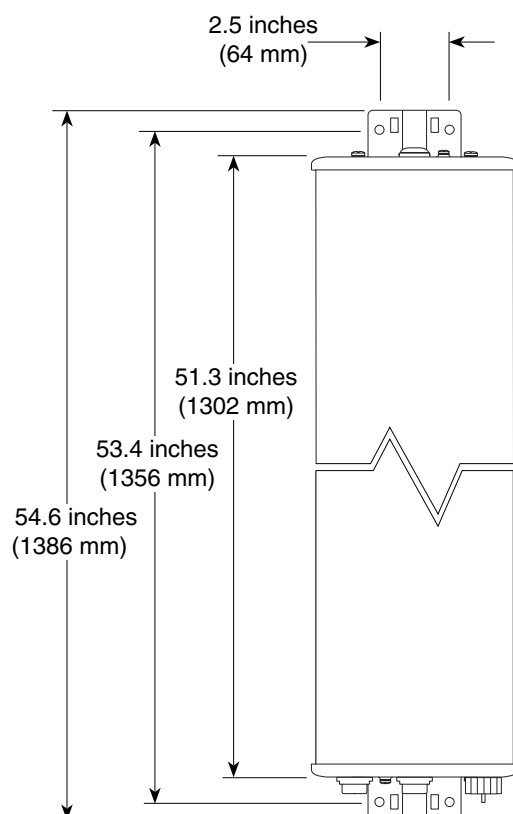


* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



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 Mount Kit 0–10 degrees downtilt angle.



Order Information:

Model	Description
741 989V01	Antenna with 7-16 DIN connectors 0°–8° adjustable electrical downtilt

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

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com