

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.

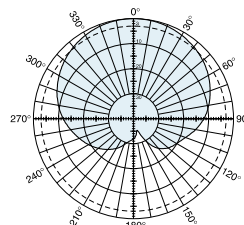
- 0-8° downtilt range.
- UV resistant pultruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

General specifications:

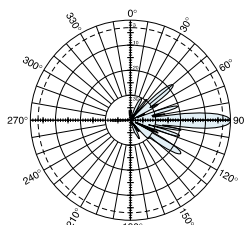
Frequency range	1710–2200 MHz
Impedance	50 ohms
VSWR	< 1.5:1
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Maximum input power	300 watts per input (at 50°C)
Electrical downtilt continuously adjustable	0–8 degrees
Connector	2 x 7-16 DIN female
Isolation	>30 dB
Weight	16.5 lb (7.5 kg)
Dimensions	51.3 x 6.1 x 2.7 inches (1302 x 155 x 69 mm)
Wind load Front/Side/Rear	at 93 mph (150kph) 81 lbf / 25 lbf / 95 lbf (360 N) / (110 N) / (420 N)
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	17 lb (7.7 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

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 Sector	0° ±60° 20 dB (typical) >10 dB	20 dB (typical) >10 dB	20 dB (typical) >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
0° electrical downtilt



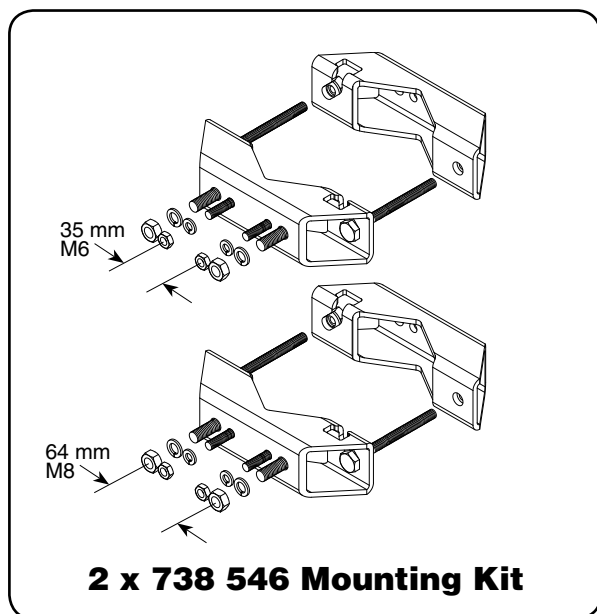
Vertical pattern
±45°- polarization
0° electrical downtilt



*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.

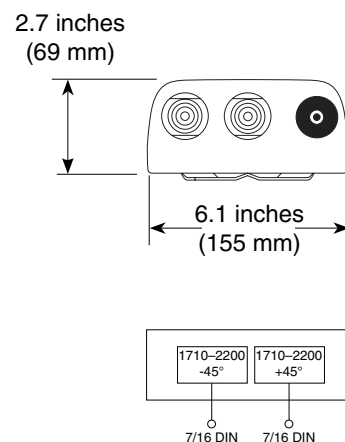
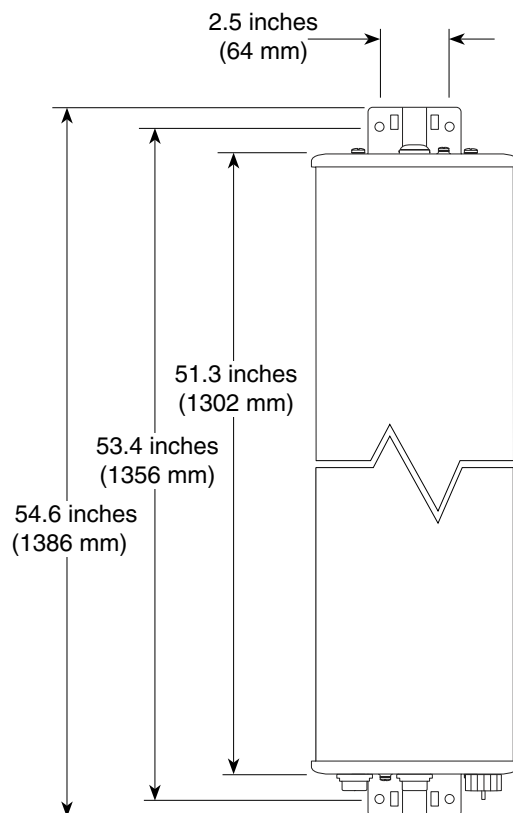


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Mounting Options:

Model	Description
2 x 738 546	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
850 10013	Tilt Kit for use with the above mounting kits, 0–16 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
741 989	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.