

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.

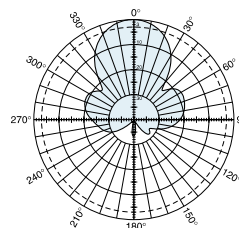
- 0-8° downtilt range.
- UV resistant pultruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt control.
- Will accommodate future 3G / UMTS applications.

**General specifications:**

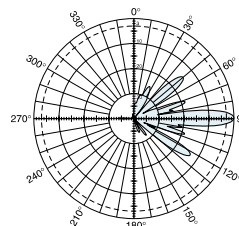
Frequency range	1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Front-to-back ratio	>30 dB (co-polar)
Connector	2 x 7-16 DIN female
Isolation	>30 dB
Maximum input power	300 watts (at 50°C) per input
Weight	29.8 lb (13.5 kg)
Dimensions	51.3 x 11.8 x 2.7 inches (1304 x 299 x 69 mm)
Equivalent flat plate area	5.48 ft <sup>2</sup> (0.509 m <sup>2</sup> )
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	62.6 x 12.7 x 4.3 inches (1589 x 322 x 108 mm)
Shipping weight	32 lb (14.5 kg)
Mounting	Fixed and tilt mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

*See reverse for order information.*

<b>Specifications:</b>	<b>1710–1880 MHz</b>	<b>1850–1990 MHz</b>	<b>1920–2170 MHz</b>
Gain	20.2 dBi	20.5 dBi	20.7 dBi
Horizontal beamwidth	36° (half-power)	35° (half-power)	33° (half-power)
Horizontal sidelobe suppression	>14 dB	>14 dB	>14 dB
Vertical beamwidth	7.4° (half-power)	7° (half-power)	6.7° (half-power)
Electrical downtilt continuously adjustable	0°–8° (manual or optional remote control)	0°–8°	0°–8°
Sidelobe suppression for:	0° 4° 8° T	0° 4° 8° T	0° 4° 8° T
First sidelobe above main beam	18 17 16 dB	18 18 17 dB	18 17 16 dB
Cross polar ratio			
Main direction	0°	20 dB (typical)	20 dB (typical)
Sector	±30°	>10 dB	>10 dB



Horizontal pattern  
±45°- polarization



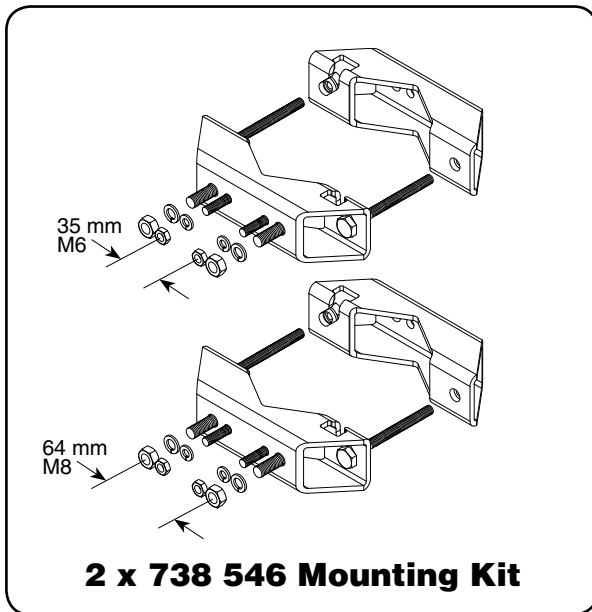
Vertical pattern  
±45°- polarization



\* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) 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.

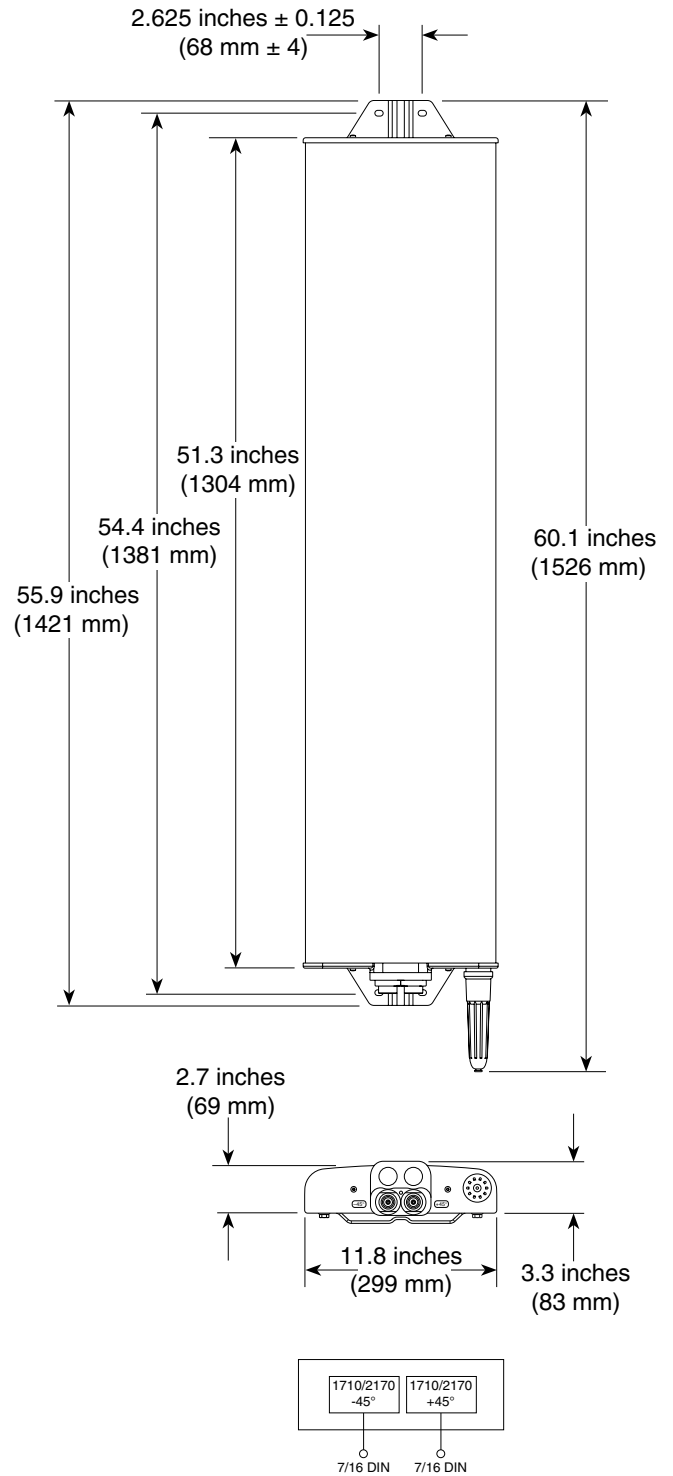


10708-F  
936.2209/h



**Mounting Options:**

Model	Description
2 x 736 546	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
850 10013	Tilt Mount Kit 0–16 degrees downtilt angle.



**Order Information:**

Model	Description
742 351	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](http://www.kathrein-scala.com).