

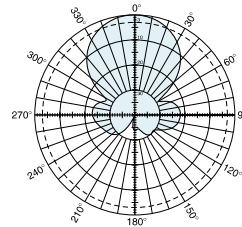
Kathrein's X-polarized adjustable electrical downtilt antennas offer the wireless carrier the ability to tailor polarization diversity sites for optimum performance. Using variable downtilt, only a few models need be procured to accommodate the needs of widely varying conditions. Remotely controlled 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.

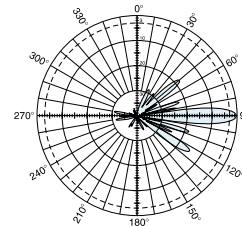
General specifications:

Frequency range	1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Connector	2 x 7/16 DIN female
Isolation	>30 dB
Maximum input power	300 watts (at 50°C) per input
Weight	22.5 lb (10.2 kg)
Dimensions	51.4 x 7.8 x 2.7 inches (1306 x 199 x 69 mm)
Equivalent flat plate area	3.75 ft ² (0.348 m ²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	63.1 x 8.7 x 4.2 inches (1604 x 221 x 107 mm)
Shipping weight	26.9 lb (12.2 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.



Horizontal pattern
±45°- polarization



Vertical pattern
±45°- polarization

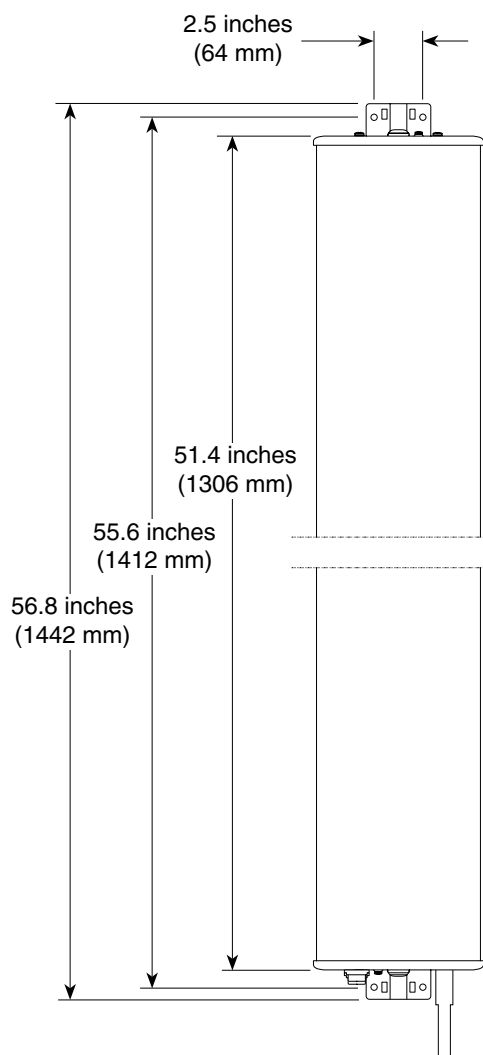
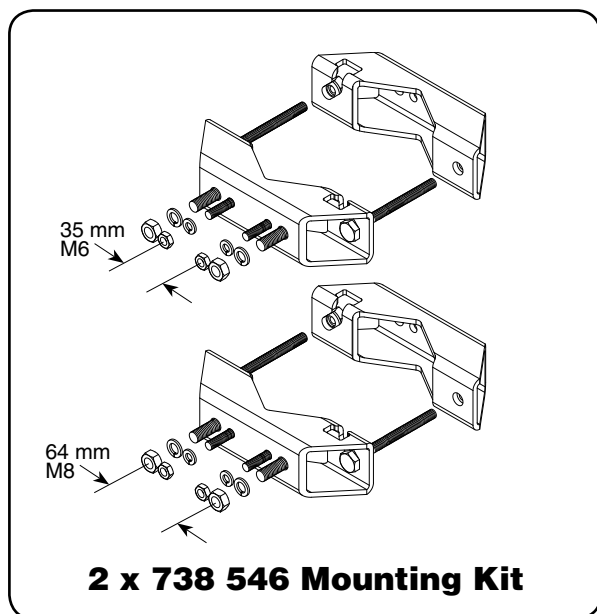


Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	19 dBi	19.5 dBi	19.6 dBi
Front-to-back ratio (180°±30)	>27 dB (co-polar) >25 dB (total power)	>30 dB (co-polar) >25 dB (total power)	>27 dB (co-polar) >25 dB (total power)
Horizontal beamwidth	47° (half-power)	45° (half-power)	44° (half-power)
Vertical beamwidth	7.3° (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:			
Vertical pattern - first sidelobe above main beam	0° 2° 5° 8° T 17 17 15 15 dB	0° 2° 5° 8° T 18 18 17 17 dB	0° 2° 5° 8° T 18 18 15 15 dB
Horizontal pattern	>18 dB	>18 dB	>18 dB
Cross polar ratio			
Main direction 0°	18 dB (typical)	18 dB (typical)	18 dB (typical)
Sector ±30°	>13 dB	>13 dB	>13 dB

*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.

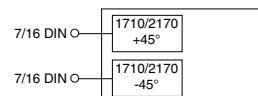
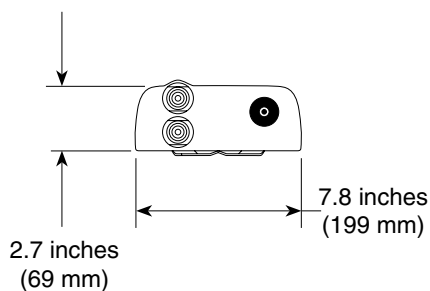


10707-G
936.2193/g



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 Mount Kit 0–15 degrees downtilt angle.



Order Information:

Model	Description
742 218	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.