

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.

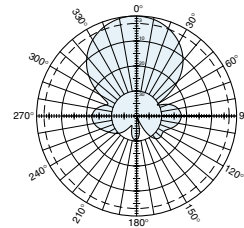
- 0-6° downtilt range.
- UV resistant pulltruded fiberglass radome.
- DC Grounded metallic parts for impulse suppression.
- No moving electrical connections.
- Wideband vector dipole technology.
- Optional remote downtilt Control.
- Will accommodate future 3G / UMTS applications.

General specifications:

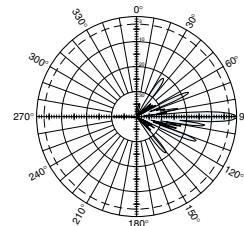
Frequency range	1710–2180 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Connector	2 x 7/16 DIN female
Isolation	>30 dB
Maximum input power	300 watts (at 50°C) per input
Weight	30.9 lb (14 kg)
Dimensions	76.6 x 7.8 x 2.7 inches (1946 x 199 x 69 mm)
Equivalent flat plate area	5.67 ft ² (0.527 m ²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	88.3 x 8.7 x 4.2 inches (2244 x 221 x 107 mm)
Shipping weight	35.3 lb (16 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.

Specifications:		1710–1880 MHz			1850–1990 MHz			1920–2180 MHz					
Average gain	tilt	0°	3°	6°	0°	3°	6°	0°	3°	6°			
	dBi	20.5	20.5	20.1	21	21	20.6	21.2	21.4	21			
Front-to-back ratio		>30 dB (co-polar) >25 dB (total power)			>27 dB (co-polar) >25 dB (total power)			>25 dB (co-polar) >25 dB (total power)					
Horizontal beamwidth		48° (half-power)			45° (half-power)			44° (half-power)					
Vertical beamwidth		4.8° (half-power)			4.6° (half-power)			4.4° (half-power)					
Electrical downtilt continuously adjustable		0°–6° (manual or optional remote control)			0°–6°			0°–6°					
Sidelobe suppression for first sidelobe above main beam		0°	2°	4°	6°	0°	2°	4°	6°	0°	2°	4°	6°
Vertical pattern		18	18	16	16	18	18	17	16	18	18	17	16
Horizontal pattern		>18 dB			>18 dB			>18 dB					
Cross polar ratio													
Main direction	0°	19 dB (typical)			18 dB (typical)			17 dB (typical)					
Sector	±30°	>13 dB			>13 dB			>13 dB					



Horizontal pattern
±45°- polarization



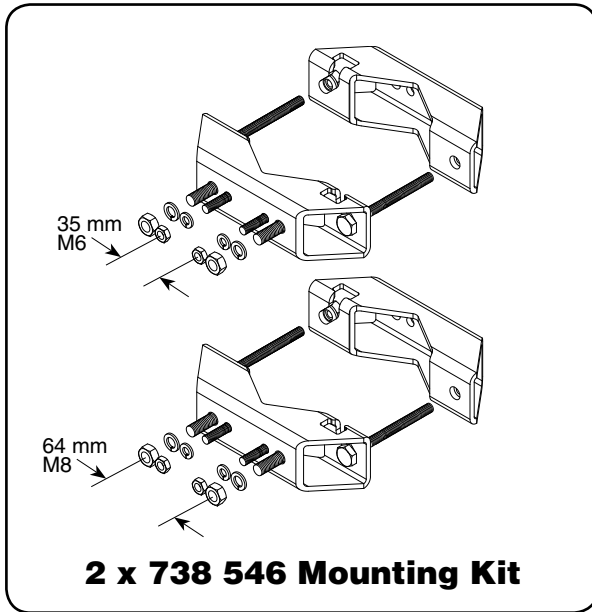
Vertical pattern
±45°- polarization



*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.

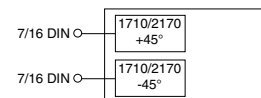
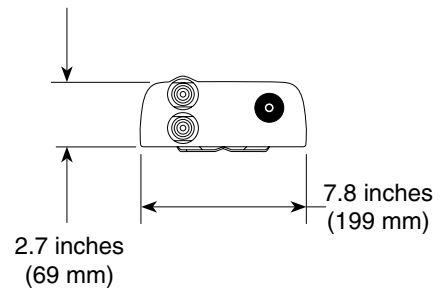
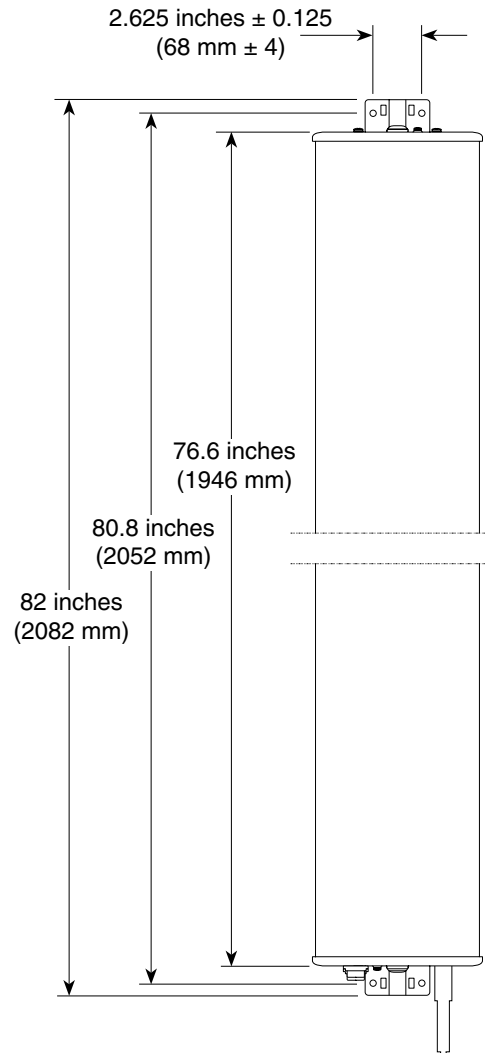


10709-E
936.2798/a



Mounting Options:

Model	Description
2 x 738 546 (shown)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
737 978	Tilt Mount Kit 0–11 degrees downtilt angle.



Order Information:

Model	Description
742 219	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.