

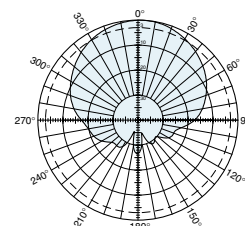
Kathrein panels are antenna products for wireless communications.  
All ADT panels feature:

- Heavy-duty construction using the highest quality materials: UV resistant pulltruded fiberglass radomes, stainless steel fasteners and hardware, rigid aluminum reflectors, and low loss coaxial cable power divider harness, all contributing to long, trouble free service life.
- Superior electrical specifications including low VSWR, wide bandwidth, flat frequency response, and superb intermodulation performance.
- Precision continuously adjustable electrical downtilt controls, manual control as standard equipment, with remote control available as an option.
- Will accommodate future 3G / UMTS applications.

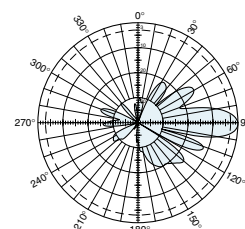
**General specifications:**

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	>25 dB (co-polar) >25 dB (total power)
Connector	4 x 7-16 DIN female
Isolation	>30 dB
Maximum input power	250 watts (at 50°C) per input
Weight	22.9 lb (10.4 kg)
Dimensions	26.8 x 12.7 x 2.8 inches (679 x 323 x 71 mm)
Wind load	at 93 mph (150kph)
Front/Side/Rear	68 lbf / 14 lbf / 68 lbf (300 N) / (60 N) / (300 N)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	36.4 x 14.2 x 5.1 inches (924 x 360 x 130 mm)
Shipping weight	25.9 lb (11.8 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



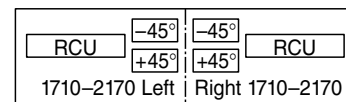
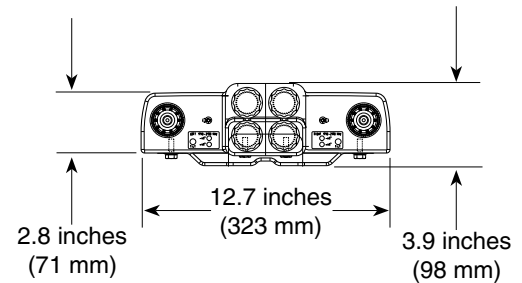
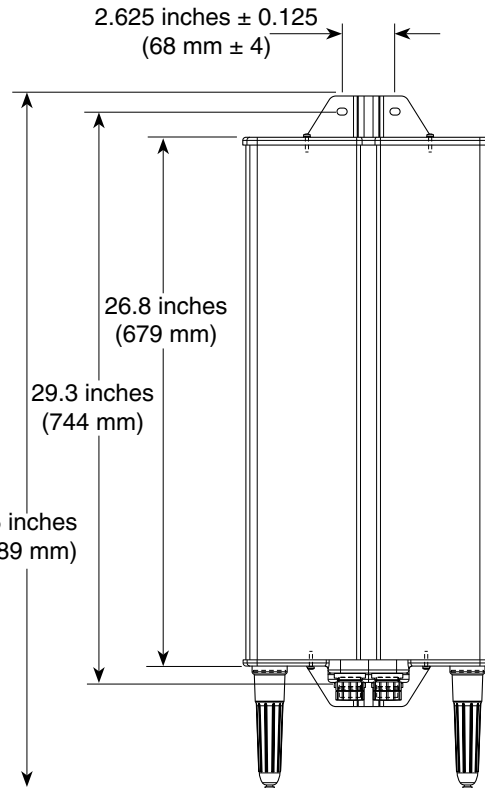
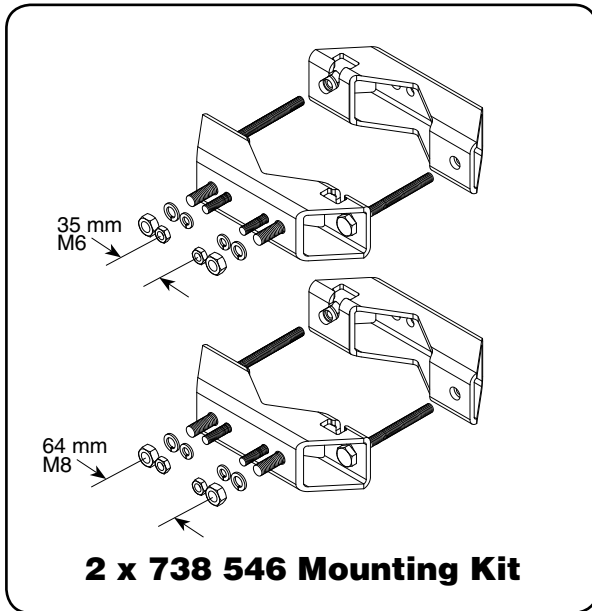
Vertical pattern  
±45°- polarization

Specifications:	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	15 dBi	15.2 dBi	15.3 dBi
Horizontal beamwidth	67° (half-power)	65° (half-power)	62° (half-power)
Vertical beamwidth	14° (half-power)	13.7° (half-power)	13° (half-power)
Electrical downtilt continuously adjustable	0°–10° (manual or optional remote control)	0°–10°	0°–10°
Vertical Pattern–sidelobe suppression for first sidelobe above main beam	0° 4° 8° 10° T 16 16 15 15 dB	0° 4° 8° 10° T 16 16 16 16 dB	0° 4° 8° 10° T 16 16 16 16 dB
Cross polar ratio			
Main direction	0°	20 dB (typical)	20 dB (typical)
Sector	±60°	10 dB (typical)	10 dB (typical)

\* 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.



10712-D  
936.2245/d



Layout of interface

**Mounting Options:**

Model	Description
2 x 738 546 (shown)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
742 033	Three-panel Sector Mounting Kit (120 deg. ea.) for 4.5 inch (114.3 mm) OD mast.
742 034	Three-panel Sector Mounting Kit (120 deg. ea.) for 5.5 inch (139.7 mm) OD mast.
850 10013	Tilt Kit for use with the above mounting kits, 0–54 degrees downtilt angle.

**Order Information:**

Model	Description
742 233	Antenna with 7/16 DIN connectors 0°–10° 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).

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