

65° Dualband Directional Antenna

Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are mountable on our compact sector brackets.

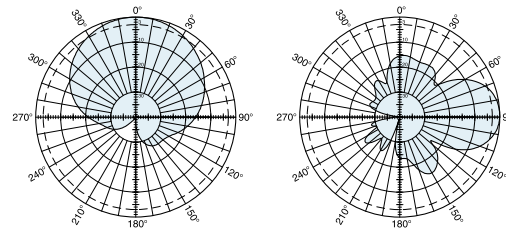
- Wide band operation.
- Exceptional intermodulation characteristics.
- High strength pultruded fiberglass radome.

General specifications:

Frequency range	806–960 MHz 1710–2170 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Connector	4 x 7-16 DIN female
Isolation intrasystem	>30 dB
intersystem	>45 dB (806–960 // 1710–2170 MHz)
Weight	16.5 lb (7.5 kg)
Dimensions	22.8 x 10.3 x 5.5 inches (579 x 262 x 139 mm)
Wind load	at 93 mph (150kph)
Front/Side/Rear	23 lbf / 18 lbf / 41 lbf (100 N) / (80 N) / (180 N)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	29 x 11.9 x 7.6 inches (736 x 302 x 192 mm)
Shipping weight	21 lb (9.5 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts. Panel may be inverted.

See reverse for order information.

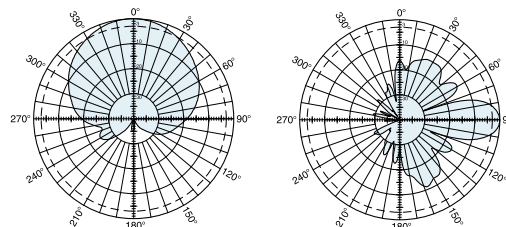
806–960 MHz



Horizontal pattern
±45°-polarization

Vertical pattern
±45°-polarization

1710–2170 MHz



Horizontal pattern
±45°-polarization

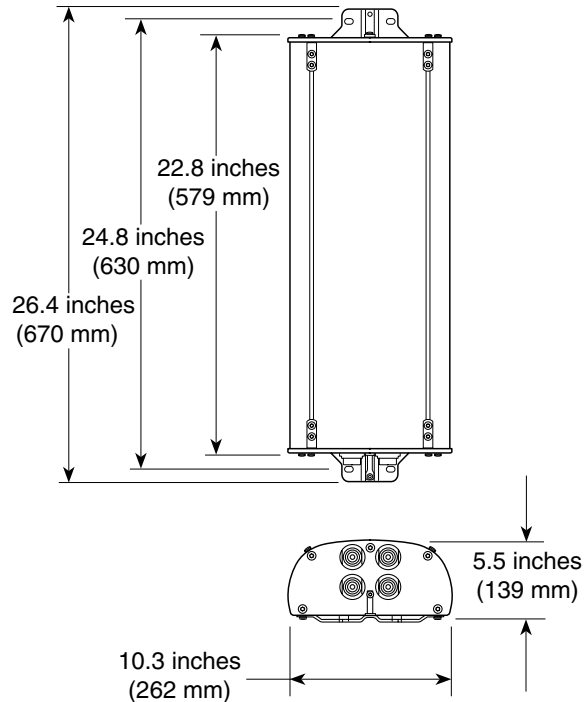
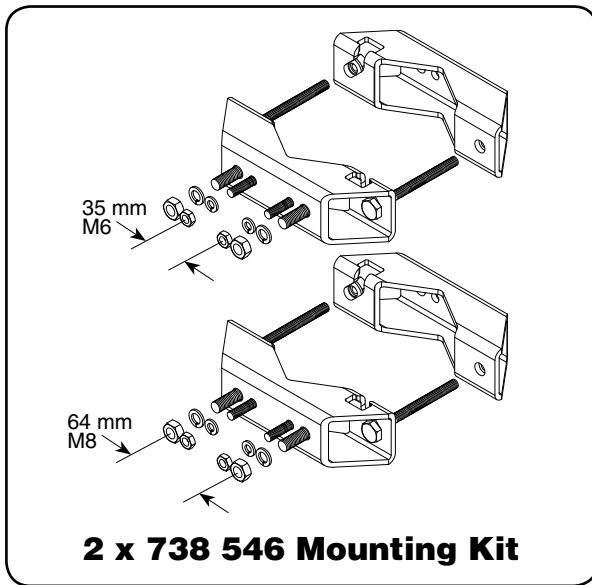
Vertical pattern
±45°-polarization



Specifications:	806–866 MHz	824–894 MHz	880–960 MHz	1710–1880 MHz	1850–1990 MHz	1920–2170 MHz
Gain	11.1 dBi	11.4 dBi	11.8 dBi	12.8 dBi	13.3 dBi	13.6 dBi
Front-to-back ratio						
co-polar	>23 dB	>23 dB	>25 dB	>25 dB	>25 dB	>25 dB
total power (180° ± 30°)	>20 dB	>20 dB	>22 dB	>22 dB	>22 dB	>22 dB
Maximum power per input	250 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	67° (half-power)	66° (half-power)	64° (half-power)	66° (half-power)	60° (half-power)	60° (half-power)
+45° and -45° polarization vertical beamwidth	34° (half-power)	33° (half-power)	30° (half-power)	20° (half-power)	18° (half-power)	17.5° (half-power)
Cross polar ratio						
Main direction 0°	25 dB (typical)	25 dB (typical)	25 dB (typical)	16 dB (typical)	18 dB (typical)	20 dB (typical)
Sector ±60°	>10 dB	>10 dB	>10 dB	>10 dB	>10 dB	>10 dB

*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.





Profile PA2

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 2 x 738 546 mounting kit 0–34 degrees downtilt angle.

1710–2170	
–45°	+45°
–45°	+45°
806–960	

Order Information:

Model	Description
742 226	Antenna with 4 x 7-16 DIN connectors 0° electrical downtilt

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

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