

65° Dualband Directional Antenna

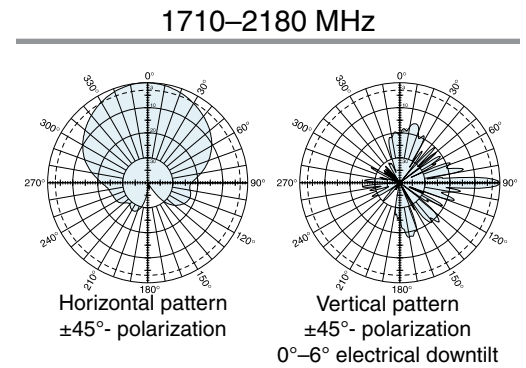
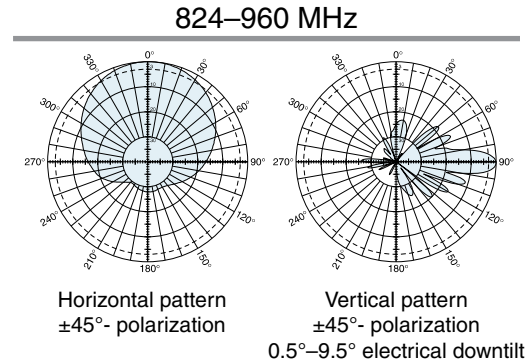
Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are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

- Wide band operation.
- Exceptional intermodulation characteristics.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

General specifications:

Frequency range	824–960 MHz 1710–2180 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3:< -150 dBc
Polarization	+45° and -45°
Connector	4 x 7/16 DIN female
Isolation	intrasystem >30 dB intersystem >50 dB (824–960 // 1710–2180 MHz)
Weight	50.7 lb (23 kg)
Dimensions	75.4 x 10.3 x 5.5 inches (1916 x 262 x 139 mm)
Equivalent flat plate area	6.16 ft ² (0.572 m ²)
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	87.2 x 11.9 x 7.6 inches (2215 x 302 x 192 mm)
Shipping weight	62 lb (28 kg)
Mounting	Fixed mount options are available for 2 to 4.6 inch (50 to 115 mm) OD masts.

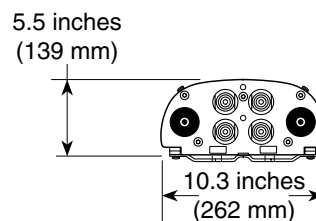
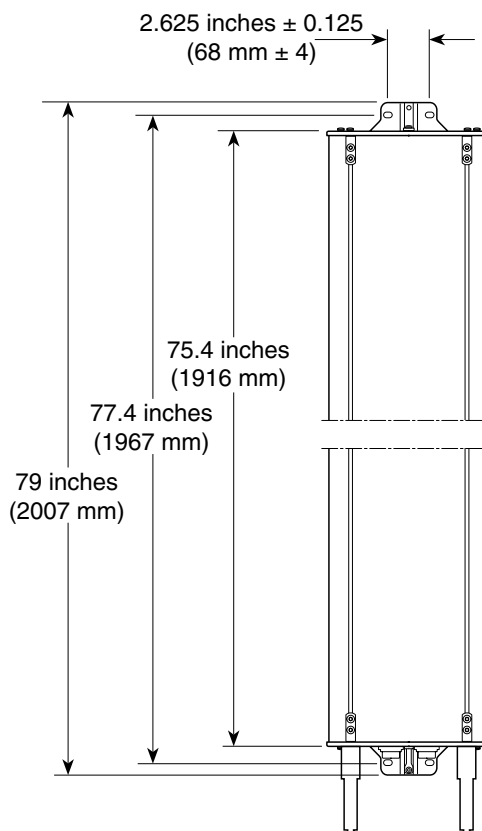
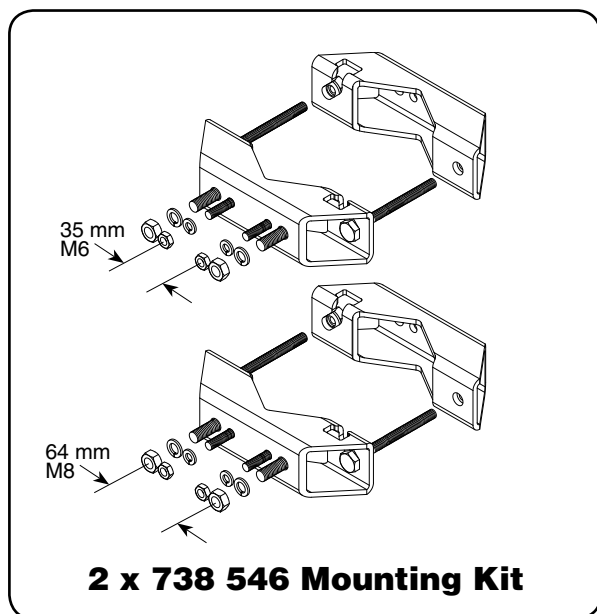
See reverse for order information.



Specifications:	824–894 MHz	880–960 MHz	1710–1880 MHz	1850–1990 MHz	1920–2180 MHz
Gain	15.5 dBi	16 dBi	17.8 dBi	18.2 dBi	18.3 dBi
Front-to-back ratio	>27 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)	>25 dB (co-polar)
Maximum input power per input	500 watts (at 50°C)	500 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)	250 watts (at 50°C)
total power	1000 watts (at 50°C)			500 watts (at 50°C)	
+45° and -45° polarization horizontal beamwidth	68° (half-power)	65° (half-power)	66° (half-power)	65° (half-power)	63° (half-power)
+45° and -45° polarization vertical beamwidth	10.5° (half-power)	10° (half-power)	5.2° (half-power)	5° (half-power)	4.7° (half-power)
Electrical downtilt continuously adjustable	0.5°–9.5°	0.5°–9.5°	0°–6°	0°–6°	0°–6°
Sidelobe suppression for first sidelobe above horizon	0° 5° 10° T 16 15 15 dB	0° 5° 10° T 18 18 16 dB	0° 3° 6° T 14 15 17 dB	0° 3° 6° T 18 17 17 dB	0° 3° 6° T 18 17 17 dB
Cross polar ratio					
Main direction	0°				
Sector	±60°				
	20 dB (typical)	20 dB (typical)	16 dB (typical)	18 dB (typical)	18 dB (typical)
	>10 dB	>10 dB	>10 dB	>10 dB	>10 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.





Mounting Options:

Model	Description
2 x 738 546	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 steel mast.
742 034	Three-panel Sector Mounting Kit (120 deg. ea.) for 5.5 inch (139.7 mm) OD steel mast.
737 978	Tilt Mount Kit 0–11 Degrees downtilt angle.

824–960		824–960	
RCU	-45°	+45°	RCU
824–960	-45°	+45°	1710–2180
		1710–2180	

Order Information:

Model	Description
742 265	Antenna with 7/16 DIN connectors

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