

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.

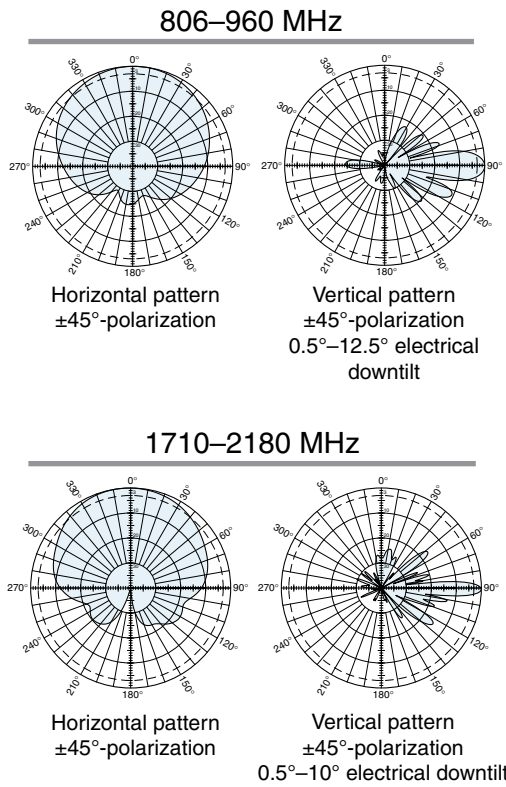
- Wide band operation.
- Exceptional intermodulation characteristics.
- Remote control ready.
- Various gain, beamwidth and downtilt ranges.
- AISG compatible.
- High strength pultruded fiberglass radome.

**General specifications:**

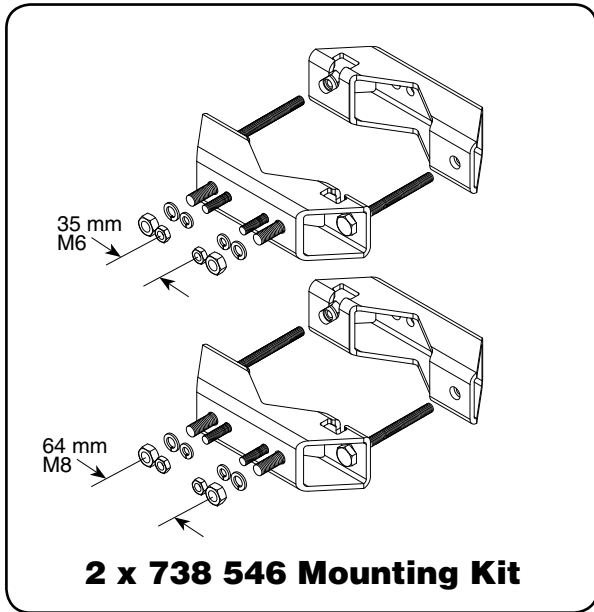
Frequency range	806–960 MHz 1710–2180 MHz
VSWR	<1.5:1
Impedance	50 ohms
Intermodulation (2x20w)	IM3: < -150 dBc
Polarization	+45° and -45°
Connector	4 x 7/16 DIN female
Isolation intrasystem intersystem	>30 dB >45 dB (806–960 // 1710–2180 MHz)
Weight	46.3 lb (21 kg)
Dimensions	54.5 x 10.3 x 5.9 inches (1384 x 262 x 149 mm)
Equivalent flat plate area	5.58 ft <sup>2</sup> (0.518 m <sup>2</sup> )
Wind survival rating*	120 mph (200 kph) sustained 150 mph (240 kph) in a 3 second burst
Shipping dimensions	67.6 x 12 x 8 inches (1716 x 304 x 204 mm)
Shipping weight	50.7 lb (23 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:	806–866 MHz			824–896 MHz			880–960 MHz			1710–1880 MHz			1850–1990 MHz			1920–2180 MHz		
Average gain (dBi)	13.4	13.4	13.1	13.6	13.6	13.4	13.9	13.8	13.5	16.4	16.4	16.2	16.4	16.5	16	16.4	15.9	15.3
Tilt	0°	6°	12°	0°	6°	12°	0°	6°	12°	0°	5°	10°	0°	5°	10°	0°	5°	10°
Front-to-back ratio	>23 dB (co-polar)			>23 dB (co-polar)			>23 dB (co-polar)			>23 dB (co-polar)			>23 dB (co-polar)			>23 dB (co-polar)		
Maximum input power per input (at 50°C)	400 watts			400 watts			400 watts			250 watts			250 watts			250 watts		
+45° and -45° polarization horizontal beamwidth	88° (half-power)			86° (half-power)			88° (half-power)			82° (half-power)			85° (half-power)			90° (half-power)		
+45° and -45° polarization vertical beamwidth	15° (half-power)			14.5° (half-power)			13.5° (half-power)			7.1° (half-power)			6.8° (half-power)			6.5° (half-power)		
Electrical downtilt continuously adjustable (manual or optional remote control)	0.5°–12.5°			0.5°–12.5°			0.5°–12.5°			0.5°–10°			0.5°–10°			0.5°–10°		
Vertical Pattern—min. side-lobe suppression for first sidelobe above main beam average	0°	6°	12° T	0°	6°	12° T	0°	6°	12° T	0°	5°	10° T	0°	5°	10° T	0°	5°	10° T
	16	16	16 dB	16	16	16 dB	14	14	13 dB	17	17	16 dB	17	18	16 dB	18	16	16 dB
	17	17	19 dB	17	17	19 dB	17	16	16 dB	20	20	18 dB	21	22	17 dB	20	20	16 dB
Front-to-back ratio (copolar)	>23 dB			>23 dB			>23 dB			>23 dB			>23 dB			>23 dB		
Cross polar ratio (typical)																		
Main direction	0° 18 dB			18 dB			20 dB			17 dB			16 dB			15 dB		
Sector ±60°	>10 dB			>10 dB			>13 dB			>10 dB			>12 dB			>10 dB		
average ±60°	16 dB			16 dB			19 dB			17 dB			19 dB			19 dB		

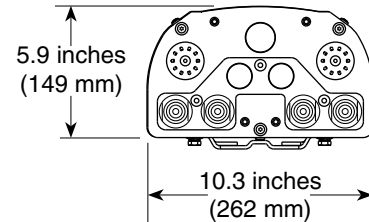
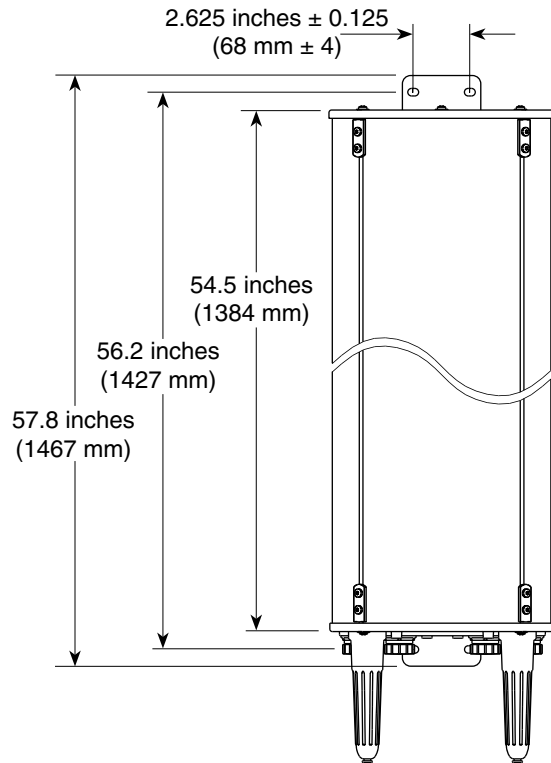


\* Mechanical design is based on environmental conditions as stipulated in EIA-222-F (June 1996) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the catalog for further details.



**Mounting Options:**

Model	Description
2 x 738 546 (shown)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
737 978	Tilt Mount Kit 0–15 degrees downtilt angle.



RCU 806–960	RCU 1710–2180
–45° +45°	–45° +45°
806–960	1710–2180

Layout of interface

**Order Information:**

Model	Description
800 10121	Antenna with 7/16 DIN connectors

All specifications are subject to change without notice. The latest specifications are available at [www.kathrein-scala.com](http://www.kathrein-scala.com).

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991  
Email: [communications@kathrein.com](mailto:communications@kathrein.com) Internet: [www.kathrein-scala.com](http://www.kathrein-scala.com)