

65° Dualband Directional Antenna

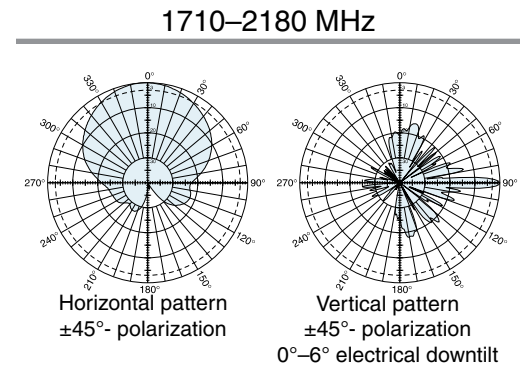
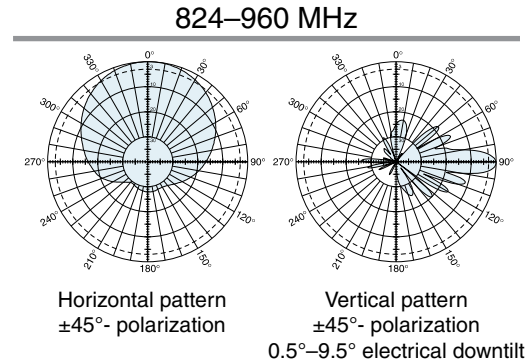
Kathrein's dual band antennas are ready for 3G applications, covering all existing wireless bands as well as all spectrum under consideration for future systems, AMPS, PCS and 3G/UMTS. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are 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 intersystem | >30 dB >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. |

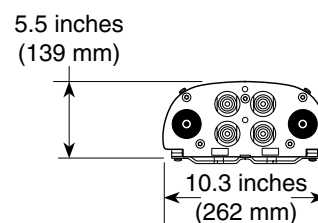
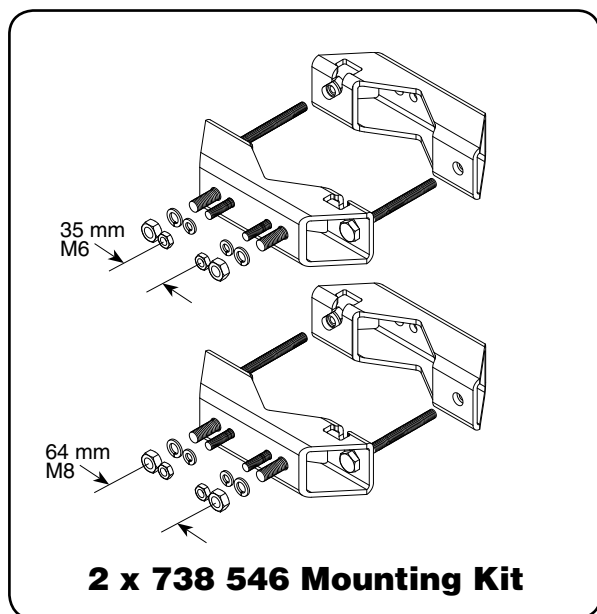
See reverse for order information.



| 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 total power | 500 watts (at 50°C) 1000 watts (at 50°C) | 500 watts (at 50°C) | 250 watts (at 50°C) | 250 watts (at 50°C) 500 watts (at 50°C) | 250 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° | 20 dB (typical) | 16 dB (typical) | 18 dB (typical) | 18 dB (typical) |
| Sector | ±60° | >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.

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