

Kathrein wideband X-polarized antennas are designed for use in PCS and 3G/UMTS polarization diversity systems.

- X-polarized (+45° and -45°).
- UV resistant pulltruded radomes.
- Wideband vector dipole technology.
- DC Grounded metallic parts for impulse suppression.

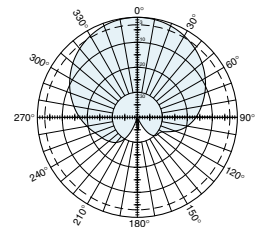
**General specifications:**

|                            |   |
|----------------------------|---|
| Frequency range            | 1710–2200 MHz   |
| VSWR                       | <1.4:1  |
| Impedance                  | 50 ohms   |
| Intermodulation (2x20w)    | IM3: < -150 dBc   |
| Polarization               | +45° and -45°   |
| Connector                  | 2 x 7-16 DIN female   |
| Electrical downtilt        | 2 degrees   |
| Isolation                  | >30 dB  |
| Maximum input power        | 300 watts (at 50°C) per input   |
| Weight                     | 14.6 lb (6.6 kg)  |
| Dimensions                 | 51.3 x 6.1 x 2.7 inches<br>(1302 x 155 x 69 mm)   |
| Equivalent flat plate area | 2.98 ft <sup>2</sup> (0.277 m <sup>2</sup> )  |
| Wind survival rating*      | 120 mph (200 kph)   |
| Shipping dimensions        | 55.3 x 6.8 x 3.7 inches<br>(1404 x 172 x 95 mm)   |
| Shipping weight            | 17.2 lb (7.8 kg)  |
| Mounting                   | Fixed and tilt mount options are available for Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast. |

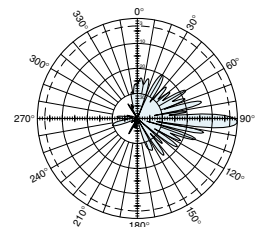
See reverse for order information.

| Specifications:   | 1710–1880 MHz     | 1850–1990 MHz     | 1920–2200 MHz     |
|---|-------------------|-------------------|-------------------|
| Gain  | 17.9 dBi          | 18.1 dBi          | 18.3 dBi          |
| +45° and -45° polarization horizontal beamwidth         | 66° (half-power)  | 65° (half-power)  | 63° (half-power)  |
| +45° and -45° polarization vertical beamwidth           | 6.6° (half-power) | 6.2° (half-power) | 5.8° (half-power) |
| Front-to-back ratio                                     | >28 dB (co-polar) | >30 dB (co-polar) | >33 dB (co-polar) |
| Sidelobe suppression for first sidelobe above main beam | >14 dB            | >15 dB            | >15 dB            |
| First null-fill below main beam                         | 25 dB (typical)   | 25 dB (typical)   | 25 dB (typical)   |
| Cross polar ratio                                       |                   |                   |                   |
| Main direction  | 0°                | 20 dB (typical)   | 20 dB (typical)   |
| Sector  | ±60°              | >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.



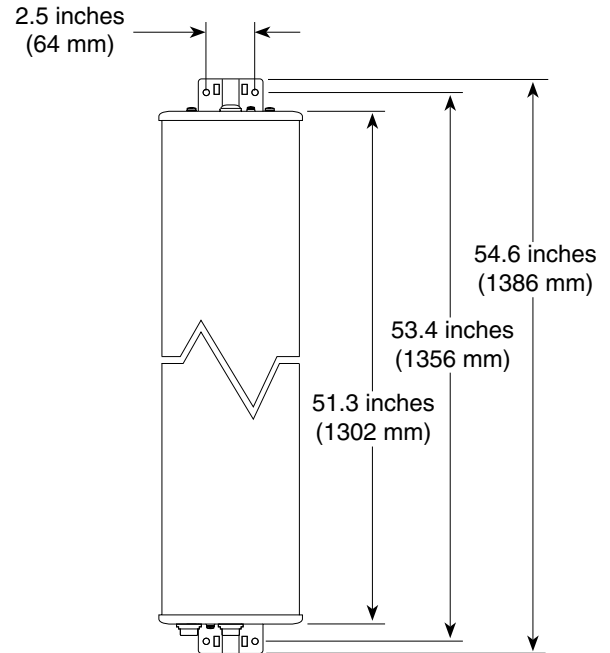
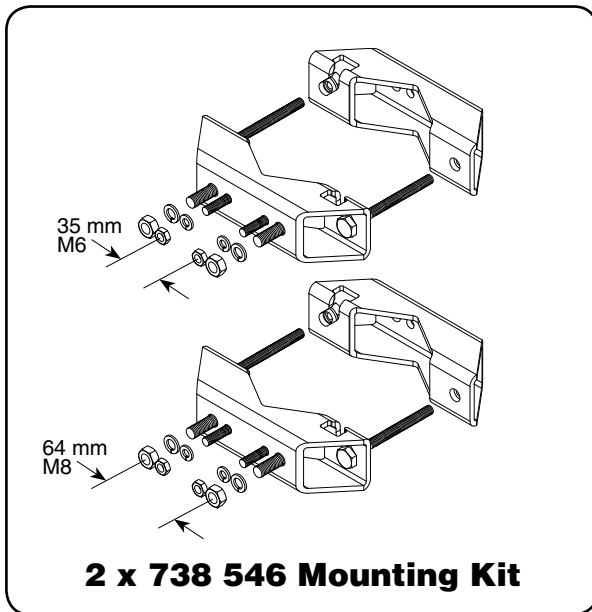
Horizontal pattern  
±45°- polarization



Vertical pattern  
±45°- polarization  
2° electrical downtilt

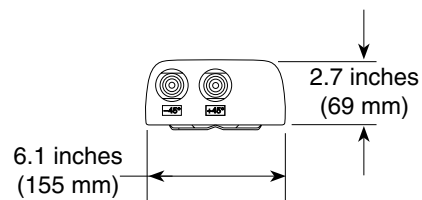


11002-A  
936.2957/a

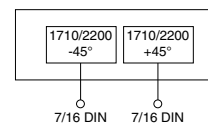


**Mounting Options:**

| Model       | Description  |
|-------------|--|
| 2 x 738 546 | Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.                       |
| 742 263     | Three-panel Sector Mounting Kit (120 deg. ea.) for 3.5 inch (89 mm) OD mast. |
| 850 10013   | Locking Tilt Mount Kit 0-16 degrees downtilt angle.                          |



Profile PF5



**Order Information:**

| Model     | Description                          |
|-----------|--------------------------------------|
| 800 10426 | Antenna with 2 x 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)