

|                   | Antenna 1      | Antenna 2        | Antenna 3      | Antenna 4        | Antenna 5      | Antenna 6        |
|-------------------|----------------|------------------|----------------|------------------|----------------|------------------|
| Dual Band (MHz)   | <b>698–894</b> | <b>1710–2170</b> | <b>698–894</b> | <b>1710–2170</b> | <b>698–894</b> | <b>1710–2170</b> |
| Dual Polarization | <b>X</b>       | <b>X</b>         | <b>X</b>       | <b>X</b>         | <b>X</b>       | <b>X</b>         |
| HPBW              | <b>65°</b>     | <b>65°</b>       | <b>65°</b>     | <b>65°</b>       | <b>65°</b>     | <b>65°</b>       |

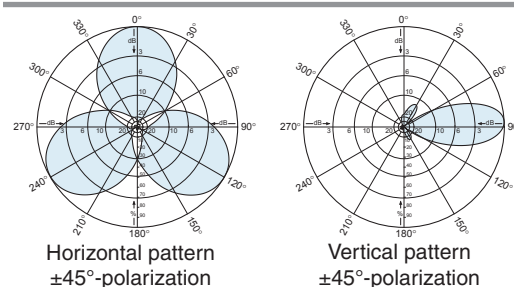
**General specifications:**

|                                      |                                                                                                           |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Frequency range                      | 698–894 MHz<br>1710–2170 MHz                                                                              |
| VSWR                                 | <1.5:1                                                                                                    |
| Impedance                            | 50 ohms                                                                                                   |
| Intermodulation (2x20w)              | IM3: <-150 dBc                                                                                            |
| Polarization                         | +45° upper and lower band<br>-45° upper and lower band                                                    |
| Connector                            | 12 x 7-16 DIN female                                                                                      |
| Isolation intrasystem<br>intersystem | >30 dB<br>>40 dB (698–894 // 1710–2170 MHz)                                                               |
| Radome color                         | Brown or grey                                                                                             |
| Weight                               | 50 lb (22.7 kg)                                                                                           |
| Height                               | 24 inches (609 mm)                                                                                        |
| Radome diameter                      | 16 inches (407 mm)                                                                                        |
| Wind load<br>Side                    | at 93 mph (150kph)<br>32 lbf (138 N)                                                                      |
| Wind survival rating*                | 100 mph (160 kph)                                                                                         |
| Shipping dimensions                  | 32 x 20 x 19 inches<br>(813 x 508 x 483 mm)                                                               |
| Shipping weight                      | 52 lb (23.6 kg)                                                                                           |
| Mounting                             | Designed to be mounted on top of a utility pole using a custom mounting bracket supplied by the customer. |

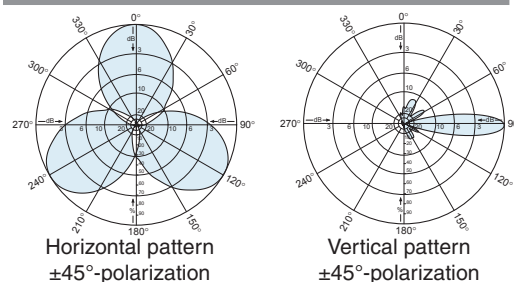
See reverse for order information.



**698–894 MHz**



**1710–2170 MHz**



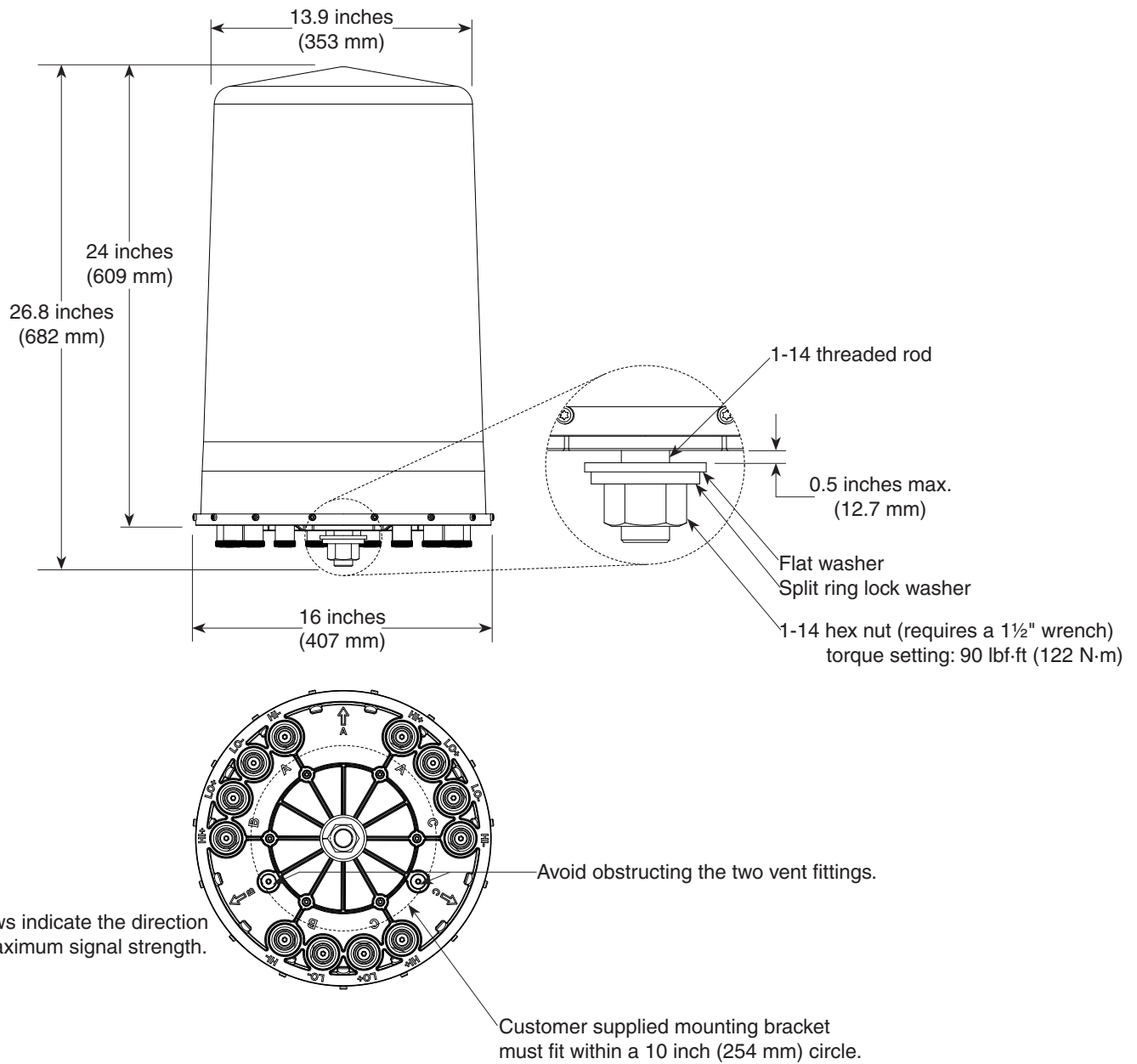
| <b>Specifications:</b>                             | <b>698–806 MHz</b>                        | <b>806–894 MHz</b>                        | <b>1710–1880 MHz</b>                      | <b>1850–1990 MHz</b>                      | <b>1920–2170 MHz</b>                      |
|----------------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Gain                                               | 10.4 dBi                                  | 11.6 dBi                                  | 13.5 dBi                                  | 13.5 dBi                                  | 13.2 dBi                                  |
| Front-to-back ratio<br>(180° ± 30°)                | >24 dB (co-polar)<br>>18 dB (total power) | >26 dB (co-polar)<br>>20 dB (total power) | >32 dB (co-polar)<br>>24 dB (total power) | >30 dB (co-polar)<br>>26 dB (total power) | >30 dB (co-polar)<br>>25 dB (total power) |
| Maximum input power                                | 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<br>horizontal beamwidth | 71° (half-power)                          | 65° (half-power)                          | 60° (half-power)                          | 62° (half-power)                          | 64° (half-power)                          |
| +45° and -45° polarization<br>vertical beamwidth   | 37° (half-power)                          | 31° (half-power)                          | 19° (half-power)                          | 17.5° (half-power)                        | 17.5° (half-power)                        |
| Cross polar ratio<br>Main direction 0°             | 18 dB                                     | 25 dB                                     | 20 dB                                     | 22 dB                                     | 25 dB                                     |
| Sector (typical) ±60°                              | >8 dB                                     | >8 dB                                     | >9 dB                                     | >9 dB                                     | >12 dB                                    |



11204-E



\* 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.



**Order Information:**

| Model     | Description                                    |
|-----------|------------------------------------------------|
| 840 10515 | Brown Dualband 700 MHz X-pol Trisector Antenna |
| 840 10516 | Grey Dualband 700 MHz X-pol Trisector Antenna  |

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

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