



Laird Connectivity's unique patented Phantom Elite<sup>®</sup> dual-band cellular antenna operates simultaneously on Cellular 821-896 MHz and PCE 1850-1990 MHz and is a tough antenna for outdoor or indoor applications. The revolutionary design measures only 2.7 inches and features field diversity with both vertical and horizontal polarization. This gives the antenna diversity, frequency agility, low visibility, wide bandwidth, and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

### FEATURES AND BENEFITS

- True Field Diversity design ensures uninterrupted transmissions in urban canyons and rural drop-off areas
- Phantom<sup>®</sup> outperforms a 3-dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

### APPLICATIONS

- Public safety
- Transportation
- Utility
- Military mobile
- Fixed radio applications

#### ELECTRICAL SPECIFICATIONS

|  | 821-896                                     | 1850-1990 |
|--|---|-----------|
| Operating Frequency (MHz)                    |   |           |
| VSWR – Avg                                   | < 2.1                                       |           |
| Frequency Bandwidth (low)                    | 75 MHz @ VSWR < 2:1                         |           |
| Frequency Bandwidth (high)                   | 140 MHz @ VSWR < 2:1                        |           |
| Return Loss (dB max)                         | -10   |           |
| Gain (dBi)                                   | 3.0   |           |
| Nominal Impedance (Ohms)                     | 50  |           |
| Max Power - Ambient 25°C (W)                 | 100   |           |
| Polarization                                 | Vertical and Horizontal                     |           |
| Pattern                                      | Patented Field Diversity (Omni-directional) |           |
| Half-Power Beamwidth (Elevation° x Azimuth°) | 130 x 360                                   |           |

#### MECHANICAL SPECIFICATIONS

|                            |  |
|----------------------------|--|
| Radome Height – mm (in.)   | 68.58 (2.70)                                 |
| Connector Weight – g (oz.) | NMO: 68.04 (0.15)<br>N-Female: 113.40 (0.25) |
| Cable and Mount            | MB195 (sold separately)                      |
| Terminations               | NMO or P Mount                               |
| Radome Material            | High Heat ABS                                |
| Color                      | White or Black                               |

#### ENVIRONMENTAL SPECIFICATIONS

|                                 |                              |
|---------------------------------|------------------------------|
| Operating Temperature – °C (°F) | -40 to +85°C (-40 to +185°F) |
| Ingress Protection Rating       | IP67                         |
| Material Substance Compliance   | RoHS                         |

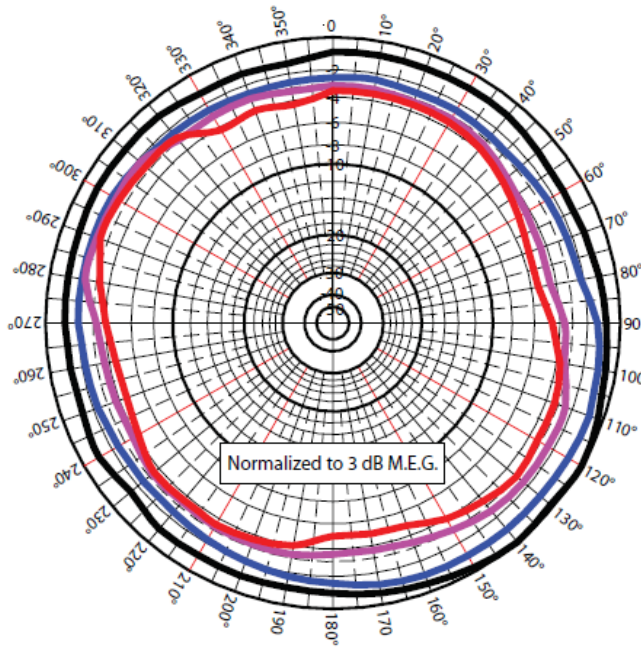
#### CONFIGURATION

| PART NUMBER     | COLOR | CONNECTOR |
|-----------------|-------|-----------|
| ETRAB821/18503  | Black | NMO       |
| ETRAB821/18503P | Black | N-Female  |
| ETRA821/18503   | White | NMO       |
| ETRA821/18503P  | White | N-Female  |

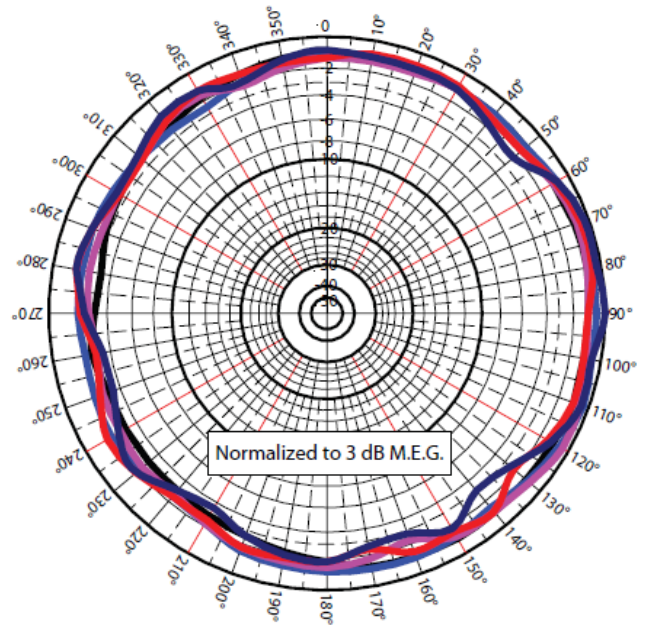
\* P indicates Permanent Mount.

RADIATION PATTERNS

Vertical-to-Vertical Polarization  
Azimuthal Pattern (Y, Z, or E-plane)



Cellular: 821-896 MHz



PCS: 1850-1990 MHz

✓RoHS

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