



FG821-18503

Dual-Band Omnidirectional Antenna 806-896 MHz / 1850-1990 MHz

FG821-18503 fiberglass base station antennas are collinear designs enclosed in a high-density fiberglass, which is covered with a protective ultraviolet inhibiting coating.

The radiating elements are made from high efficiency copper and are carefully phased to provide maximum gain in the horizontal plane. The mounting sleeves are tuned to eliminate RF currents from the transmission line, resulting in a cold sleeve allowing great freedom in mounting. This high quality and well-focused beam provides the highest gain and best efficiency.

FEATURES AND BENEFITS

- Every FG fiberglass base antenna is tested on a network analyzer to assure the best performance
- Special UV-treated - Stands up to the sun
- Durable gold anodized sleeve and cap with N-female connector
- Custom tuning available
- FedEx/UPS shippable

APPLICATIONS

- Omnidirectional (circular) outdoor antenna applications used by private organizations and government agencies around the globe.
- Typical applications include land-based and marine radio and data transmissions for public safety agencies, commercial organizations, and the military

ELECTRICAL SPECIFICATIONS

| ELECTRICAL SPECIFICATIONS | |
|---------------------------------|------------------------|
| Model Name | FG821-18503 |
| Operating Frequency (MHz) | 806-896 1850-1990 |
| Gain (dBi) | 0 3 |
| VSWR - Max | < 2:1 |
| Max Power - Ambient 25°C (W) | 100 |
| Nominal Impedance (Ohms) | 50 |
| Polarization | Vertical |
| Pattern | Omnidirectional |
| Vertical Plane 3 dB Beamwidth | 60° 110° |
| Horizontal Plane 3 dB Beamwidth | 360° |

MECHANICAL SPECIFICATIONS

| | |
|--|--|
| Dimensions - Height x Diameter - cm (inches) | 34.9 x 3.3 (13.75 x 1.310) |
| Weight - kg (lbs.) | 0.45 (< 1.0) |
| Cable Type | N/A |
| Lightning Protection | Lightning arrester LABH350NN (sold separately) |
| Mounting | FM2 mounting kit (sold separately) |

ENVIRONMENTAL SPECIFICATIONS

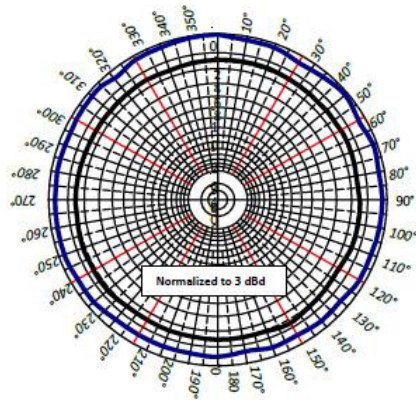
| | |
|--|-----------------|
| Rated Wind Velocity - km/hr (mph) | 210 (125) |
| Rated Wind Velocity (with 0.5-in radial ice) - km/hr (mph) | 137 (85) |
| Lateral Thrust @ 125 mph wind velocity - kg (lbs.) | 26 (57) |
| Wind Resistance - sq. m (sq. ft.) | 0.0116 (0.1256) |
| Material Substance Compliance | RoHS |

CONFIGURATION

| PART NUMBER | CABLE LENGTH | CONNECTOR |
|-------------|--------------|-----------|
| FG821-18503 | N/A | N-Female |



LABH350NN Lightning Arrester (Sold Separately)



Azimuthal Patterns (X,Y or E-Plane)

- Cellular Frequency: 821-896 MHz PCS
- Frequency: 1850-1990 MHz

te.com

TE, and TE connectivity (logo) are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2023 TE Connectivity. All Rights Reserved.

09/23

TE TECHNICAL SUPPORT CENTER

| | |
|-------------------|-----------------------|
| USA: | +1 (800) 522-6752 |
| Canada: | +1 (905) 475-6222 |
| Mexico: | +52 (0) 55-1106-0800 |
| Latin/S. America: | +54 (0) 11-4733-2200 |
| Germany: | +49 (0) 6251-133-1999 |
| UK: | +44 (0) 800-267666 |
| France: | +33 (0) 1-3420-8686 |
| Netherlands: | +31 (0) 73-6246-999 |
| China: | +86 (0) 400-820-6015 |