





## FG4500

# Fiberglass Omnidirectional Antennas 450-470 MHz

Laird Technologies' 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 before shipping 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

ELECTRICAL SPECIFICATIONS	
Operating Frequency (MHz)	450-470
VSRW	<1.5:1 (20 MHz Bandwidth), <2.0:1 (36 MHz Bandwidth)
Gain (dBi)	2.15
Nominal Impedance (Ohms)	50
Max Power - Ambient 25°C (W)	100
Polarization	Vertical
Pattern	Omnidirectional
Half-Power Beamwidth (Elevation°/Azimuthal°)	70°/360°
Connector	N-Female connector

MECHANICAL SPECIFICATIONS	
Dimensions - diameter x height - mm (inches)	33.3 x 510 (1.31 x 20.1)
Weight - kg (lbs.)	0.42 (0.92)
Operating Temperature, oC (oF)	-30° to +85° (-220 to 1850)
Rated Wind Velocity - kph (mph)	210 (125)
Rated Wind Velocity (with 0.5" radial ice) - kph (mph)	137 (85)
Equivalent Flat Plate Area - sq. meter (sq. ft.)	0.069 (0.2274)
Mounting Information	FM2 Mounting Kit (Sold separately)
Lightning Protection	DC ground

### **RADITION PATTERNS**

2700 MHz



Elevation Pattern (Y, Z, or H-plane)

Azimuthal Pattern (Y, Z, or E-plane)

#### **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

#### te.com

TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. 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 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 Laird 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 Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

©2021 TE Connectivity. All Rights Reserved.

10/21 Original



