



LP-GTRN Series

- *DC Pass Multi-Strike Design*
- *Replaceable Gas Tube*
- *Broadband Bidirectional Design*
- *Excellent IL/RL Performance Over the Entire Operating Frequency Band*
- *Fully Weatherized Housing*
- *Solid Brass Construction for Durability and Long Life*

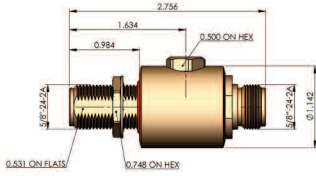


Lightning and Surge Protection for The 21st Century™

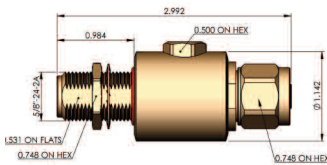
The **Times-Protect™** LP-GTRN series is an exceptional broadband DC pass design for lightning protection applications requiring DC power to be supplied to the electronics. Offering outstanding surge performance the LP-GTRN series is the perfect protection solution for distributed antenna systems, tower mounted amplifiers, GPS systems and other applications requiring DC pass circuitry. These devices exhibit outstanding RF performance with high surge current handling characteristics. Its fully weatherized housing meeting IP67 standard allows for outdoor as well as indoor installation. The LP-GTRN series also has excellent power handling capability. The N connector designs cover the entire frequency spectrum from DC through 3000MHz.

LP-GTRN Series:

- LP-GTR-NFF
N Female connectors on both sides - bidirectional
- LP-GTR-NFM
N Male connector on one side & N Female connector on the other side - bidirectional



- LP-GTR-NFF
DC Pass N Type F/F

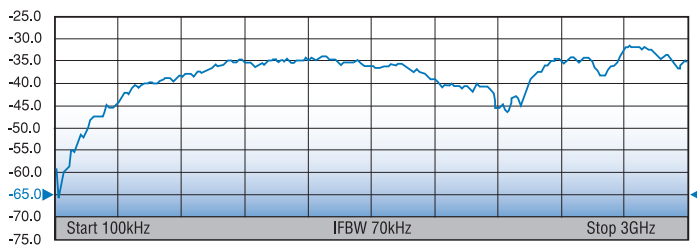


- LP-GTR-NFM
DC Pass N Type F/M

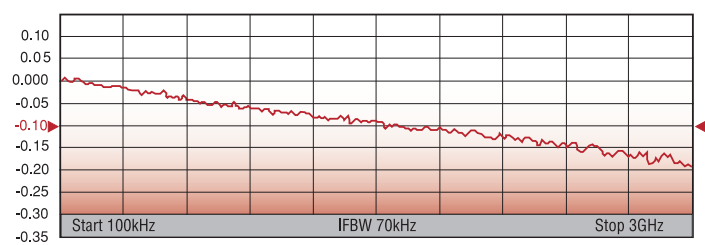
* All Dimensions shown in inches

| Electrical Specifications | | |
|---|----------------------------------|--------------|
| Impedance | 50 Ω | |
| Frequency Range | DC-3000 MHz | |
| VSWR/Return Loss | < 1.15 / <-26dB | |
| Insertion Loss | < 0.25 dB | |
| Impulse Spark Over | 20KA multiple (8x20µs wave-form) | |
| Turn-on Voltage | 90Vdc | |
| Impulse Sparkover | 500V (1kV/µs) | |
| Average Power | 50 Watts | |
| Protection Circuit | DC Pass | |
| Mechanical / Environmental Specifications | | |
| Temp Range Storage/Operating | -40°C - +85°C | |
| Weatherization | IEC 60068 40/085/21 & IP67 | |
| Thermal Shock | US MIL-STD 202, Meth.107,Cond.B | |
| Vibration | US MIL-STD 202, Meth.204,Cond.B | |
| Shock | US MIL-STD 202, Meth.213,Cond.I | |
| RoHS Compliant | Yes | |
| Wear/Mating Cycles | 500 minimum | |
| Recommended Coupling Nut Torque | 7 to 10 lb-in | |
| Material Specifications | | |
| Component | Material | Plating |
| Body | Brass | White Bronze |
| Inner Conductor Male | Brass | Silver |
| Inner Conductor Female | Phosphor Bronze | Silver |
| Washer | Brass | White Bronze |
| Coupling Nut | Brass | White Bronze |
| Insulator | TPX | -- |
| O-Ring | Silicone Rubber | -- |

S11 **TYPICAL RETURN LOSS (dB)**



S21 **TYPICAL INSERTION LOSS (dB)**



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