# Times Protect

### LP-STRL-N Series

- Long Term Evolution (LTE) and 700 MHz Public Safety Applications
- Excellent PIM Performance
- Outstanding IL/RL Characteristics
- DC Blocked for Superior Surge Performance
- High Surge Current/Power Rated
- Broadband Multi-Strike Design
- Fully Weatherized Housing
- Solid Brass Construction for Durability and Long Life





## Lightning and Surge Protection for The 21st Century<sup>TM</sup>

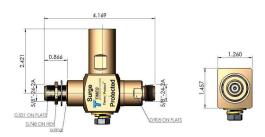
The Times Protect™ LP-STRL-N high performance series is an exceptional DC blocked design for outstanding surge performance, capable of withstanding multiple lightning strikes. The operating band width of 680MHz-2200MHz makes the LP-STRL-N series suitable for a broad range of applications. This design covers the 700MHz Band for Public Safety Services as well as LTE (Long Term Evolution) applications. With its excellent passive intermodulation performance, outstanding RF performance over the entire operating band and superior power handling capability, the LP-STRL-N product family is unequaled. Its fully weatherized housing meeting IP67 standard allows for outdoor as well as indoor installation.

#### LP-STRL-N Series:

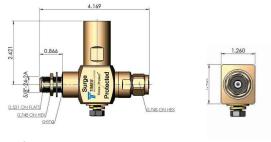
- LP-STRL-NFF
  N Female connectors on surge and protected sides
- LP-STRL-NMP
  N Male connector on protected side with N Female connector on surge side
- LP-STRL-NMS
  N Male connector on surge side with N Female connector on protected side



### Times-Protect<sup>TM</sup>



 LP-STRL-NFF 680-2200MHz DC Blocked N Type F/F



• LP-STRL-NMP 680-2200MHz DC Blocked N Type M on Protected

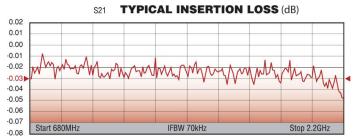


- LP-STRL-NMS
  680-2200MHz DC Blocked N Type M on Surge
- \*All dimensions shown in inches

| Electrical Specifications                 |  |  |
|---|--|--|
| Impedance                                 | 50 Ω   |  |
| Frequency Range                           | 680-2200 MHz   |  |
| VSWR/Return Loss                          | < 1.13:1 / <-24dB (680-700MHz)<br>< 1.1:1 / <-26dB (700-2200MHz) |  |
| Insertion Loss                            | < 0.1dB  |  |
| Average Power                             | 500 Watts  |  |
| PIM                                       | <-160dBc   |  |
| Maximum Surge Current                     | 50kA (8x20µs wave-form)  |  |
| Residual Pulse Voltage                    | < 100V (50kA 8x20µs wave-form)                                   |  |
| Residual Pulse Voltage                    | < 1V (4kV/2kA 1.2x50/8x20µs wave-form)                           |  |
| Energy Throughput Rating                  | < 1nJ (4kV/2kA 1.2x50/8x20µs wave-form)                          |  |
| Protection Circuit                        | DC Blocked   |  |
| Mechanical / Environmental Specifications |  |  |
| Temp Range Storage/Operating              | -40°C - +85°C  |  |
| Weatherization                            | IEC 60068 55/155/56 & 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 in-lb  |  |
| Unit Weight                               | 0.53kg/pc / 1.17lb   |  |

| Material Specifications |                 |              |
|-------------------------|-----------------|--------------|
| Component               | Material        | Plating      |
| Body                    | Brass           | White Bronze |
| Inner Conductor Male    | Brass           | Silver       |
| Inner Conductor Female  | Phosphor Bronze | Silver       |
| Coupling Nut            | Brass           | White Bronze |
| Insulator               | PTFE            |              |
| 0-Ring                  | Silicone Rubber |              |







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