



### GAS DISCHARGE SURGE PROTECTORS

DC to 3000 MHz Operation

The surge protectors offered by Laird Technologies are an integral part of any antenna installation in protecting sensitive equipment from surges caused by lightning. The ultra-fast gas discharge tube design gives quick response to power surges and dumps the excess power safely to the ground. A ground lug terminal is supplied to provide superior grounding. The units have the ability to withstand multiple lightning strikes. The SP3-90-6 passes DC voltage, so it is also suitable for systems that pass DC power through the coax, such as remote amplifiers.

#### FEATURES RoHS

- Ultra fast gas discharge
- Multiple strike 6 KA discharge
- 0.4 db max insertion loss

#### APPLICATIONS

- Lightning protection for antenna systems
- 900 MHz to 2.4 GHz antenna systems
- WiMAX

| Parameter                                 | Min  | Typ                                  | Max  | Units      |
|---|------|--------------------------------------|------|------------|
| Frequency Range                           | DC   |                                      | 3000 | MHz        |
| Insertion Loss                            | .1   | .2                                   | .4   | dB         |
| VSWR                                      |      | 1.2 : 1                              |      |            |
| DC Breakdown Voltage                      | 72   | 90                                   | 108  | V          |
| Impulse Discharge<br>(5 times, 8/20 µsec) | 6000 |                                      |      | A          |
| Impedance                                 |      | 50                                   |      | Ohm        |
| Insulation Resistance<br>(DC 100 V)       | 50   |                                      |      | Meg Ohm    |
| Input Power (@2.4 GHz)                    |      |                                      | 42   | W          |
| Operating Temperature                     | -40  |                                      | +85  | °C         |
| Weight                                    |      | 5.8 (164)                            |      | oz (g)     |
| Dimensions<br>(includes connectors)       |      | 2.75 x 1.25 x 1.75<br>(70 x 32 x 44) |      | in<br>(mm) |

#### SYSTEM ORDERING:

SP3-90-6-BFF DC to 3000 MHz, 6 KA, bulkhead N female to N female, 90 V surge protector  
 SP3-90-6-BFM DC to 3000 MHz, 6 KA, bulkhead N female to N male, 90 V surge protector

#### NOTES:

All shipments F.O.B. Schaumburg, IL 60173

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ANT-DS-SP3-90-6\_0414

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