

DC - 5.8 GHz Coax Lightning Surge Protector for 400-Series Low Loss Cable with N-Female Bulkhead Connector

Applications

- Protect wireless devices and networks from damage due to lightning strikes
- IEEE 802.11a/b/g/n wireless systems
- Coax cable assemblies with built in protection
- Distributed Antenna Systems (DAS) protection

Features

- Reliable performance from DC ~ 6 GHz
- Attaches directly onto LMR®400 & equivalent cable
- Crimp design reduces insertion loss
- Multi-strike capability and replaceable gas tube
- Bi-directional protection, will pass DC



Model: AL6-NF-14-9

Description

The AL6-NF-14-9 is a very high-performance in-line gas discharge tube suppressor featuring wide-band operation up to 5.8 GHz. The unit features a bulkhead N-Female connector on one end and a solderless crimp style connector interface on the other. The N-Female Bulkhead connector features a rubber "O"-ring seal for mounting through an enclosure wall or using the optional stainless steel mounting bracket.

Due to its superior RF performance this unit is ideal for IEEE 802.11a and other 5.2 - 5.8 GHz ISM and UNII applications, as well as 3.5 GHz WLL applications. Since this protector will pass DC it is suitable for applications where DC is carried through the coax cable such as remote amplifiers and LNA's.

The AL6-NF-14-9 is designed to be attached directly onto a coax cable via the solderless crimp end of the protector. This helps improve insertion loss since a connector is eliminated. These protectors are for use with L-com's CA-400 low loss cable, LMR®400, TWS-400 and other equivalent low loss cable.

The bi-directional design of the AL6-NF-14-9 provides protection no matter which way it is installed. The unit's replaceable gas tube element, multi-strike capability and fast response time make it suitable for a wide range of applications. A ground lug and terminal is provided directly on the lightning protector housing, which provides superior grounding. Replacement gas tubes are available (**LPX090-6**) as well as an optional stainless steel mounting bracket (**HGX-LPMOUNT01**).



The AL6-NF-14-9 is also available on pre-made CA-400 cable assemblies. Standard cable lengths range from 2ft to 20ft and feature either N-Male or N-Female connectors. Contact L-com for custom lengths and connectors.

Specifications

Electrical Specifications

Frequency Range	DC ~ 5.8 GHz
Impedance	50 Ohms
VSWR	<1.3
Insertion Loss	<0.7 dB
Dielectric Withstanding Voltage	2500V (RMS)
Contact Resistance	Center Conductor $\leq 1\text{m}\Omega$ / Outer Conductor $\leq 1\text{m}\Omega$
Insulation Resistance	$\geq 5000\text{M}\Omega$
Gas Discharge Breakdown Voltage	90V

Mechanical Specifications

Connector	N-Female Bulkhead
Cable Type	Low-Loss 400-Series Coax (LMR® 400, CA-400, etc)
Shell/ Body Material	Nickel Plated Brass
Contact	Gold Plated Phosphor Bronze/Beryllium
Insulator	PTFE
Dimensions L x W x H (max)	2.7 x 0.9 x 1.2 in. (68.2 x 23.1 x 30.6 mm)
Weight	0.23 lbs (0.10 kg)

