

## CF-FF-90-3

**RF Equipment Protection up to 3GHz**

Novaris coaxial surge protectors are designed to protect transceivers and antennas of common communication equipment from the effects of lightning and other electrical disturbances. They are available in a range of voltages to suit different power levels and in all common RF connector types. The products with the -E suffix come complete with a stud for grounding and mounting the unit. There are several optional mounting kits available.

**Replaceable Protective Element**

Novaris coaxial surge protectors incorporate user replaceable gas discharge tubes to ensure a long service life even in severe conditions.

**Premium All-Metal Enclosure**

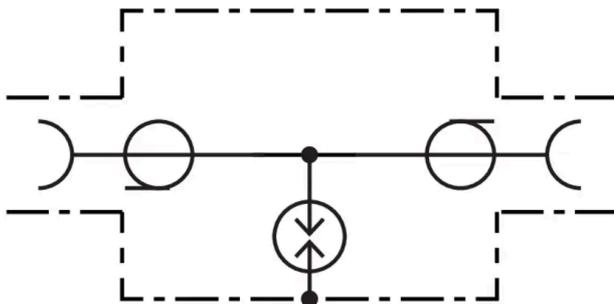
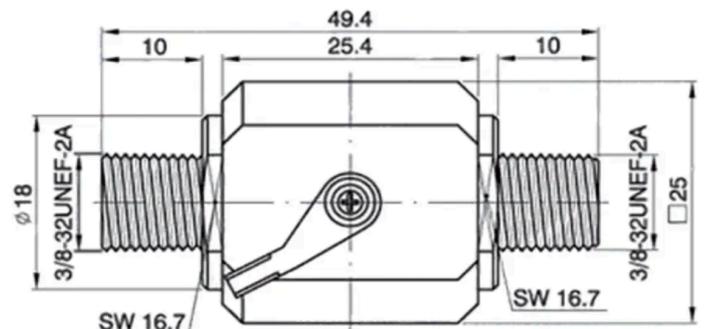
CNC machined brass with high gloss nickel plating is utilized for the body of the product. This provides excellent durability and high frequency characteristics.

**Pass-Through Design**

The pass-through design allows frequencies from DC to 3GHz to be passed by the device, allowing power to be provided over the conductor in addition to the RF signals.



*Image for illustrative purposes only*

**Wiring****Dimensions****Notes**

The power levels listed relate to the power handling capability of the SPD itself. Note other factors such as antenna mismatch and connector type may also limit the maximum power handling capability of this product, consult your system designer

## Specifications

## Electrical Specifications

Connection type		Series
Modes of protection		Signal-Earth
Sparkover voltage		90VDC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	20kA
Maximum working frequency		3GHz
Voltage protection level @ 1kV/ $\mu$ s		<650V
Power Rating		15W
Impulse durability C2 10x8/20 $\mu$ s		5kA
Overstressed fault mode		Mode 3
Capacitance (line-shield @1MHz)		<1pF
Characteristic impedance		75 $\Omega$
VSWR		<1.1:1
Return loss		>26dB
Insertion loss		<0.1dB

## Mechanical Specifications

Connection type		F-Type
Connection orientation		F/F
Minimum operating temperature		-40°C
Maximum operating temperature		70°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		Bulkhead
Environmental rating		IP55
Enclosure material		Brass
Enclosure finish		Nickel Plated
Length		50mm
Width		25mm
Height		25mm

## Standard Specifications

IEC 61643-21	SPD connected to telecommunications and signalling networks - Cat C2, D1
AS 1768	Signalling/Telecommunications surge protection
ITU-T K.44	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents

## Shipping Specifications

Weight		75g
Customs tariff		85363000, 85363010

## Other Specifications

Product Code		CF-FF-90-3
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## Options

