RF Equipment Protection High Power

Novaris high power surge protectors suit applications including MF, HF and VHF transmitters to 70kW. The spark gap arrester has an optical arc sensor which may be used to momentarily interrupt the transmitter.

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Product Series — **CEIA**
Connector Size — **412**
Options — **1**

CEIA-412

Electrical Specifications		
Connection type		Series
Modes of protection		Signal-Earth
Maximum discharge current (8/20µs)	I_{max}	100kA
Power rating		>70kW limited only by coaxial cable
Surge element		Spark gap, gap setting: 2mm / 10kW
Spark over voltage		2.6kV for 2mm gap
Characteristic impednce		50W
Overstressed fault mode		Mode 3 (open circuit)
Insertion loss		<0.1dB to 500MHz <0.2db to 1GHz (gap setting: 1mm)
Return loss		>26dB to 500MHz >20dB to 1GHz (gap setting: 1mm)
Arc sensor		Optical detector utilising photodiode, feeding transmitter interface to provide momentary shutdown
Power requirements		Arc sensor: 12VDC @ 35mA
Transmission medium		Arc detector fed to transmitter via optic fibre. Alternate metallic cable available.

Mechanical Specifications		
Operating temperature / humidity		-40 to +85ºC / 5 to 95% non-condensing
Connection type		4 1/2" EIA
Mounting		Bulkhead / flange
Environmental		IP 55
Enclosure		Brass and copper
Options		
Spark gap only, no TX controller		Standard
1RU 19" rack, one TX controller only		1
3RU 19" rack, up to 14 TX controllers		n*

* Denotes number of TX controllers

Standards Compliance
ITU-T K.44
AS/NZS 1768
IEEE C62.41
IEC 61643-21
UL497B