

**RF Equipment Protection High Power**

Novaris high power surge protectors suit applications including MF, HF and VHF transmitters to 50kW. The spark gap arrester has an optical arc sensor which may be used to momentarily interrupt the transmitter.



**CEIA - 078 - 1**

Product Series  
Connector Size

Options

CEIA-078

CEIA-158

CEIA-318

Electrical Specifications				
Connection type			Series	
Modes of protection			Signal-Earth	
Maximum discharge current (8/20µs)	$I_{max}$		100kA	
Power rating			>50kW limited only by coaxial cable	
Surge element			Spark gap, gap setting: 2mm / 10kW	
Spark over voltage			2.6kV for 2mm gap	
Characteristic impedance			50Ω	
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 +85°C / 5 to 95% non-condensing		
Connection type	7/8" EIA	1 5/8" EIA	3 1/8" 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