

## RJ45-24CAT6

## Local Area Network Protectors

Novaris network protection products are specifically designed for the protection of twisted pair Ethernet systems with a combination of rugged and fine grain protection elements.

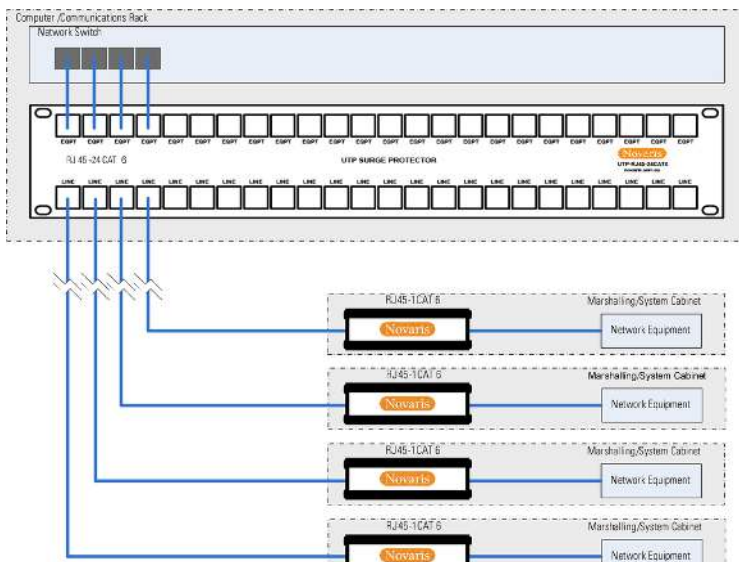
**10kA Front End Protection & Low Impedance Secondary Protection.** The RJ45-CAT6 protection products employ a 10kA Gas Discharge Tube per signal pair to dissipate the energy associated with large common mode surges. The silicon based secondary protection element used on each signal pair provides exceptional protection for your equipment whilst allowing network speeds up to Gigabit/1000BaseT.

**PoE, PoE+, High Power PoE and beyond.** The Novaris RJ45-CAT6 protection devices are designed to be compatible with PoE and handle up to 1 A of current per signal pair at up to 80VDC. This combination allows for Gigabit PoE systems with 4 pair power up to an outstanding 160W.

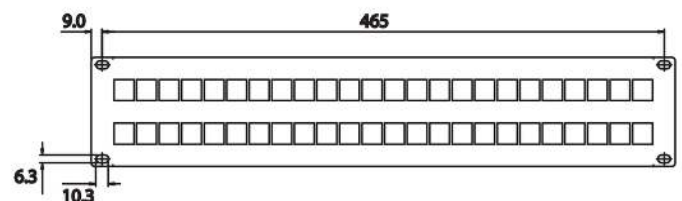
**UTP and STP cabling compatible.** Novaris network protection products utilise shield pass through connectors and metal bodies to allow for uninterrupted shielded network spans. The RJ45-1CAT6-EC90 option is necessary for earth isolation at the remote end of a network. This prevents current loops from appearing on the network shield.



## Wiring



## Dimensions



## Standards







IEC 61643-21:2012  
AS/NZS 1768:2007  
UL 497B  
ITU-T K.44: 2012  
AS/CA S008:2010  
AS/NZS 4117:1999  
AS/CA S009:2013

SPD connected to telecommunications and signalling networks - Cat C2, D1  
Signalling/Telecommunications surge protection  
Protectors for data communications and fire-alarm circuits  
Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents  
Requirements for Customer Cabling Products  
Surge Protective Devices for Telecommunications Applications  
Installation requirements for customer cabling (Wiring rules)

# Technical Information Sheet

## Specifications

### Electrical Specifications

Connection type		Series
Number of lines		24 x RJ45 / 4 pairs & shield
Modes of protection		Transverse and Common
Maximum continuous voltage (DC)	$U_c$	6V
Maximum PoE voltage		80VDC
Maximum continuous voltage (AC)	$U_c$	4V
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	5kA
Maximum common mode discharge current (8/20 $\mu$ s)		10kA
Maximum discharge current (10/350 $\mu$ s)		1kA
Maximum common mode discharge current (10/350 $\mu$ s)	$I_{imp}$	2kA
Impulse durability C2 10x8/20 $\mu$ s		1.5kA
Impulse durability D1 2x10/350 $\mu$ s		0.5kA
Maximum load current	$I_L$	1A
AC durability 5x1s		1Arms
Overstressed fault mode		Mode 3
Response time	$t_A$	<5ns
Line resistance		0.1 $\Omega$
Line inductance		0.2 $\mu$ H
Insertion loss @ 150 $\Omega$		-
3 dB Frequency @ 150 $\Omega$		250MHz
Attenuation @220MHz		1.7dB
NEXT @250 MHz		35.8dB
Return Loss @ 250MHz		11.2dB














### Electrical (L-L) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	20V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	9V
Voltage protection level @ 100 V/ s		350V
Capacitance	- +	8pF

### Electrical (L-PE) Specifications

Voltage protection level @ 1 kV/ $\mu$ s	$U_p$	350V
L-PE Voltage protection level @ 1.5 kA 8/20 $\mu$ s		500V
Voltage protection level @ 3 kA 8/20 $\mu$ s	$U_p$	-
Voltage protection level @ 100 V/ s		230V
Capacitance	- +	1.5pF

### Mechanical Specifications

Minimum operating temperature		-40°C
Maximum operating temperature		70°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		Rack mount
Environmental rating		IP20
Enclosure material		Steel
Enclosure finish		Black powdercoat
Terminal type		RJ45 Socket
Terminal capacity		-
Terminal screw torque		-
Earthing		Earth terminal
Length		483mm
Width		20mm
Height		88mm

### Other Specifications

Product Code  RJ45-24CAT6

### Shipping Specifications

Weight		2kg
Customs tariff		85363000