

RJ45-24CAT6-1RU

Local Area Network Protectors

Novaris network protection products are designed for the protection of equipment connected to twisted pair network cabling systems. They are compliant with CAT5, CAT6 and CAT6A cabling standards.

RJ45-24CAT6-1RU is specifically designed to fit perfectly in standard server racks, helping you maximize your rack space without compromising on performance.

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 RJ45-CAT6 protection devices are compliant with PoE standards and can pass up to 1A of current per signal pair at up to 80VDC. This combination allows for Gigabit PoE systems with 4 pair power up to 160W.

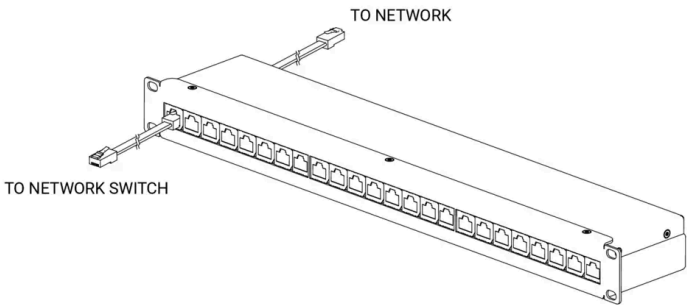
UTP and STP cabling compatible

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.

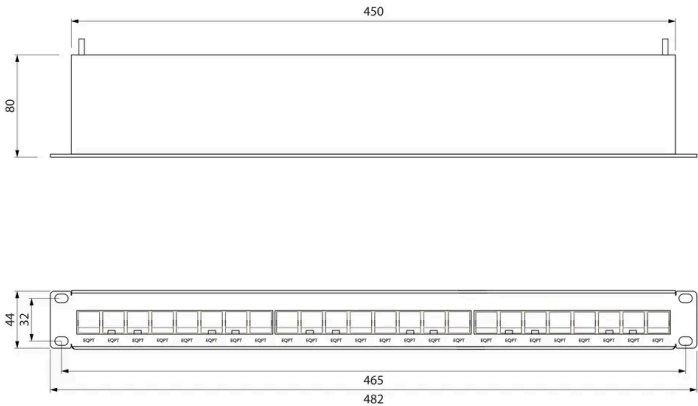


Image for illustrative purposes only

Wiring








Dimensions



Product Datasheet

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 continuous voltage (AC) | U_c | 4V |
| Maximum PoE voltage | | 80VDC |
| Maximum discharge current (8/20 μ s) | I_{max} | 5kA |
| Maximum common mode discharge current (8/20 μ s) | | 10kA |
| Maximum discharge current (10/350 μ s) | I_{imp} | 1kA |
| Maximum common mode discharge current (10/350 μ s) | I_{imp} | 2kA |
| Impulse durability C2 10x8/20 μ s | | 1.5kA |
| Impulse durability D1 2x10/350 μ s | | 0.5kA |
| Maximum load current | I_L | 1A |
| AC durability 5x1s | | 1A rms |
| Overstressed fault mode | | Mode 3 |
| Line resistance |  | 0.1 Ω |
| Line inductance |  | 0.2 μ H |
| 3 dB Frequency @ 150 Ω | | 250MHz |
| Earthing | | Earth terminal |
| Attenuation @220MHz | | 1.7dB |
| NEXT @250 MHz | | 35.8dB |
| Return Loss @ 250MHz | | 11.2dB |









Electrical (L-L) Specifications

| | | |
|--|-------|-----|
| Voltage protection level @ 1 kV/ μ s | U_p | 20V |
| Voltage protection level @ 100 V/ s | | 9V |
| Capacitance | - - | 1pF |
| Response time | t_A | 1ps |

Electrical (L-PE) Specifications

| | | |
|---|-------|------|
| Voltage protection level @ 1 kV/ μ s | U_p | 350V |
| L-PE Voltage protection level @ 1.5 kA 8/20 μ s | | 750V |
| Voltage protection level @ 100 V/ s | | 230V |
| Capacitance | - - | <2pF |

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 |

Standard Specifications

| | |
|--------------|--|
| IEC 61643-21 | SPD connected to telecommunications and signalling networks - Cat C2, D1 |
| AS 1768 | Signalling/Telecommunications surge protection |
| UL 497B | Protectors for data, communications and fire-alarm circuits |
| ITU-T K.44 | Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents |
| AS/CA S008 | Requirements for Customer Cabling Products |
| AS/NZS 4117 | Surge Protective Devices for Telecommunications Applications |
| AS/CA S009 | Installation requirements for customer cabling (Wiring rules) |

Shipping Specifications

| | | |
|----------------|---|--------------------|
| Weight |  | 1.8kg |
| Customs tariff |  | 85363000, 85363010 |

Other Specifications

| | | |
|--------------|---|-----------------|
| Product Code |  | RJ45-24CAT6-1RU |
|--------------|---|-----------------|