# SMARTSERIES

## HIGH SPEED NETWORK SURGE PROTECTION


RJ45-S

MODEL: **RJ45-S**

**TRANSFER SPEED**

1000
MB/S

**REACTION SPEED**

PICO
<1000 PICOSECONDS

**WARRANTY**

12
MONTHS

THOR
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## FEATURES

- RJ45 INPUT & OUTPUT
- DIN RAIL MOUNTABLE
- 1000MB/S TRANSFER SPEED
- 12 MONTHS WARRANTY

## PROTECTS

- SERVERS
- SWITCHES/ ROUTERS/ MODEMS
- IP TV
- PAY TV DECODERS
- SECURITY CAMERAS
- TELEPHONE
- COMPUTER
- ANY DEVICE ON A NETWORK

MODEL: **RJ45-S**

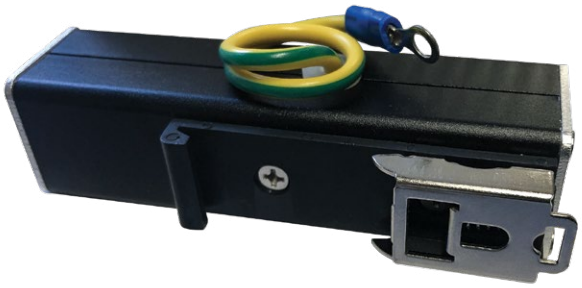
# SMART SERIES RJ45-S

## HIGH SPEED NETWORK PROTECTION

Introducing the Smart Series RJ45-S high speed network protection. Line induced spikes and voltage surges that could damage the host Computer, PLC or controller are easily suppressed by the RJ45-S. This unit is DIN rail mountable and fits between the Hub output and the terminals. Using two standard RJ Connectors for easy connecting and disconnecting. Damaging energy is diverted to system earth by means of fast acting components, the earth connection is connected via a plug allowing for quick removal or replacement of the device.

### What causes spikes and surges in network cabling?

1. Power cables crossing network cables.
2. Equipment induced transients and surges.
3. Earth Potential Rise – this is where lightning strikes nearby and energises the surrounding earth. This energised area can cause surges to travel through, up, into and around walls and frames of structures. Network cabling is often housed in wall cavities and this surge then injects itself into the network cabling travelling through the cable and damaging connected equipment.

### Installation

1. Run the grounding line as short as possible.
2. Loops or parallel runs of protected and unprotected lines must be avoided.

SMART BRAIN

The RJ45-S is designed to protect devices connected through network cabling on a Direct Current (DC) supply. The device does not filter. It offers spike and surge protection to ensure data transfer speed is maintained. The product is relying on a solid earth connection to maximise the efficiency of the protection circuit capability. The earth connection is critical to ensure that when a dangerous high voltage spike or surge is detected the RJ45-S is able to divert this threatening voltage down to earth in the first instance. If the surge is too great to divert all the excess energy back to earth then the RJ45-S protection circuit will absorb the residual surge. The RJ45-S is designed to sacrifice itself if it is unable to absorb the surge and in doing so protect the connected equipment. By sacrificing itself it can prevent the connected equipment from damage and save on downtime associated costs. Replacement of the RJ45 protection module is simple and very quick.

### TECHNICAL SMARTS

Product Dimensions: 94.5mm(W) x 25mm(L) x 25mm(D) | Nominal voltage Un(V) DC 48V | Nominal discharge current (in) (8/20µ | Max. discharge current (in) (8/20µS 10kA | Voltage protection level (UP) @1KV/us: UP : ≤ 45V (Line-Line), ≤ 600V (Line-PE) | Max transfer speed 1000MB/s | Response time <1000 picoseconds (ps) | Connection input RJ45 | Connection output RJ45 | 6.8V Clamping on Data Pins (1,2,3 &6) & 53V Clamping on POE Pins (4,5,7 & 8) | Model No. RJ45-S.

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