

# PD3041

Hardened Surge Protection Device – RJ11 & Two Wire Terminal Block



## Overview

EtherWAN's PD3041 Hardened Surge Protection Device shields DSL equipment from dangerous power surges, ground loops, and electrical discharges caused by faulty wiring or lightning. With full wire-to-wire and wire-to-earth surge protection, the PD3041 is ideal for use in areas that have unstable supplies of electricity, and on sites that have excessive amounts of electromagnetic interference. Applications include outdoor IP cameras and access points, as well as rooftop networking cabinets.

EtherWAN — "When Connectivity is Crucial."

## Spotlight

### + Robust Protection Against Voltage Surges + Wide Operating Temperature Range

- Provides pair-to-pair protection through RJ11 connector & terminal block
- Operates in temperatures from -40 to 75°C, with throughput under 100Mbps

### + Flexible Installation

- Supports DIN-rail or desktop installation

## Specifications



## + Mechanical

### Casing

- Aluminum Case
- IP20

### Dimensions

- 30 x 62.5 x 100mm (W x H x D)
- (1.18" x 2.5" x 3.8")

### Weight

- 184g  $\pm$ 5%

### Installation

- RJ11 Connector / Terminal Block

## + Environment

### Operating Temperature

- -40 to 75°C (-40 to 167°F)

### Storage Temperature

- -40 to 85°C (-40 to 185°F)

### Ambient Relative Humidity

- 5% to 95% (non-condensation)

## + Regulatory Approvals

### ISO

- Manufactured in an ISO 9001 facility

### Safety

- UL 497B

### EMI

- CE
- FCC Part 15 Class B
- VCCI

### Industrial Compliance

- IEC 61643-21

## + Electrical

### Maximum continuous operating voltage UC

- $\leq$ 185VDC

### Maximum continuous voltage UC (Wire-Wire)

- $\leq$ 185VDC

### Maximum continuous voltage UC (Wire-Ground)

- $\leq$ 185VDC

### Nominal current IN

- $\leq$ 380mA (25°C)

### Operating effective current IC at UC

- $\leq$ 6 $\mu$ A

### RResidual current IPE

- $\leq$ 4 $\mu$ A

### Nominal discharge surge current In (8/20) $\mu$ s (Core-Core)

- $\leq$ 5kA

### Nominal discharge surge current In (8/20) $\mu$ s (Core-Earth)

- $\leq$ 5kA

### Total surge current (8/20) $\mu$ s

- 10kA

### Nominal pulse current Ian (10/1000) $\mu$ s (Core-Core)

- $\leq$ 100A

### Nominal pulse current Ian (10/1000) $\mu$ s (Core-Earth)

- $\leq$ 100A

### Nominal pulse current Ian (10/700) $\mu$ s (Core-Core)

- $\leq$ 150A

### Nominal pulse current Ian (10/700) $\mu$ s (Core-Earth)

- $\leq$ 150A

### Output voltage limitation at 1kV/ $\mu$ s (Core-Core) spike

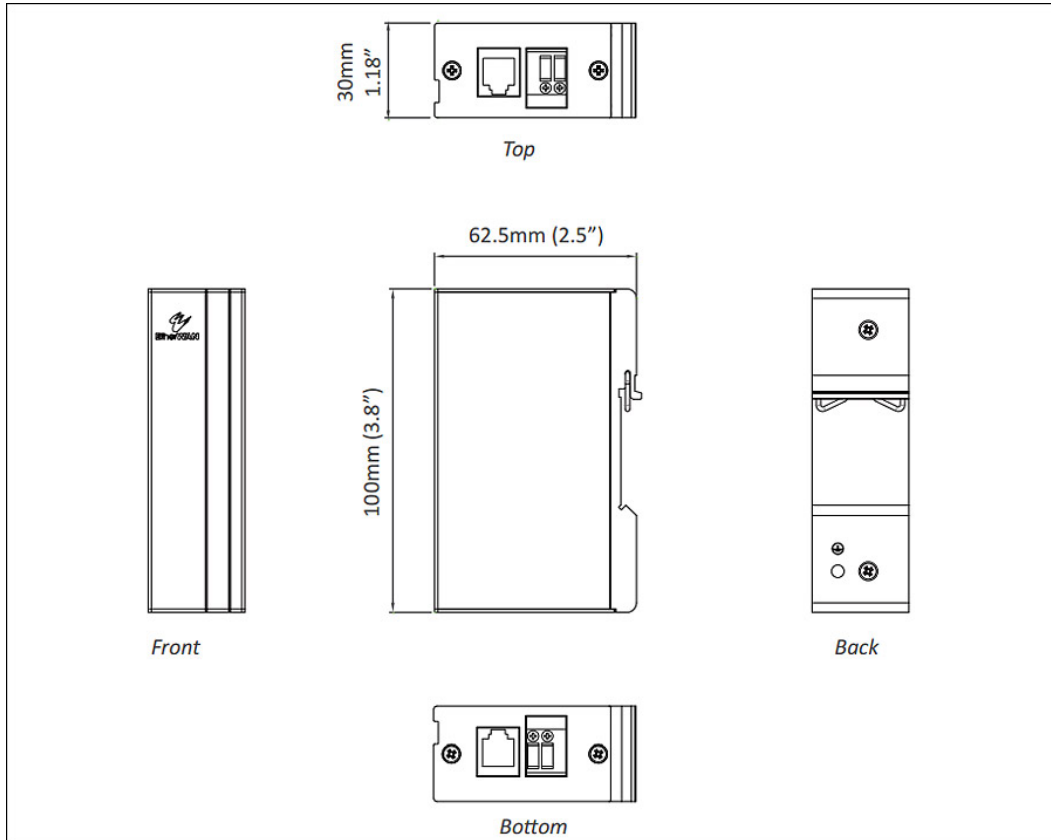
- $\leq$ 250V





- **Output voltage limitation at 1kV/ $\mu$ s (Core-Earth) spike**
  - $\leq 250V$
- **Residual voltage at In, (Conductor-Conductor)**
  - $\leq 120V$
- **Residual voltage at In, (Conductor-Ground)**
  - $\leq 120V$
- **Voltage protection level UP (Core-Core)**
  - $\leq 300V$  (B2-100A)
  - $\leq 300V$  (C1-500A)
  - $\leq 300V$  (C2-5kA)
- **Voltage protection level UP (Core-Earth)**
  - $\leq 300V$  (B2-100A)
  - $\leq 300V$  (C1-500A)
  - $\leq 300V$  (C2-5kA)
- **Response time  $t_A$  (Core-Core)**
  - $\leq 100ns$
- **Response time  $t_A$  (Core-Earth)**
  - $\leq 100ns$
- **Input attenuation aE, sym.**
  - Typ. 0.5dB ( $\leq 5MHz$ )
  - Typ. 0.3dB ( $\leq 8MHz/150\Omega$ )
  - Typ. 0.3dB ( $\leq 2.5MHz/600\Omega$ )
- **Near-end crosstalk attenuation**
  - $\leq 35dB$  (At 250MHz/100 $\Omega$ )
- **Cut-off frequency  $f_g$  (3dB), sym. in 100 Ohm system**
  - Typ. 50MHz
- **Resistance in series**
  - $3.3\Omega \pm 10\%$
- **Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)**
  - B2 (4kV/100A)
  - C1 (1kV/500A)
  - C2 (10kV/5kA) (Terminal Block)
  - C2 (6kV/3kA) (RJ11)

## Dimensions



## Ordering Info

### + Model

PD3041	Hardened Surge Protection Device – RJ11 & Two Wire Terminal Block Type
--------	--

