

# 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 ±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  
≤185VDC

Maximum continuous voltage UC (Wire-Wire)  
≤185VDC

Maximum continuous voltage UC (Wire-Ground)  
≤185VDC

Nominal current I<sub>N</sub>  
≤380mA (25°C)

Operating effective current I<sub>C</sub> at UC  
≤6μA

RResidual current I<sub>PE</sub>  
≤4μA

Nominal discharge surge current I<sub>n</sub> (8/20) μs  
(Core-Core)  
≤5kA

Nominal discharge surge current I<sub>n</sub> (8/20) μs  
(Core-Earth)  
≤5kA

Total surge current (8/20) μs  
10kA

Nominal pulse current I<sub>an</sub> (10/1000) μs (Core-Core)  
≤100A

Nominal pulse current I<sub>an</sub> (10/1000) μs (Core-Earth)  
≤100A

Nominal pulse current I<sub>an</sub> (10/700) μs (Core-Core)  
≤150A

Nominal pulse current I<sub>an</sub> (10/700) μs (Core-Earth)  
≤150A

Output voltage limitation at 1kV/μs (Core-Core) spike  
≤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  $a_E$ , 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)

**Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)**

B2 (4kV/100A)

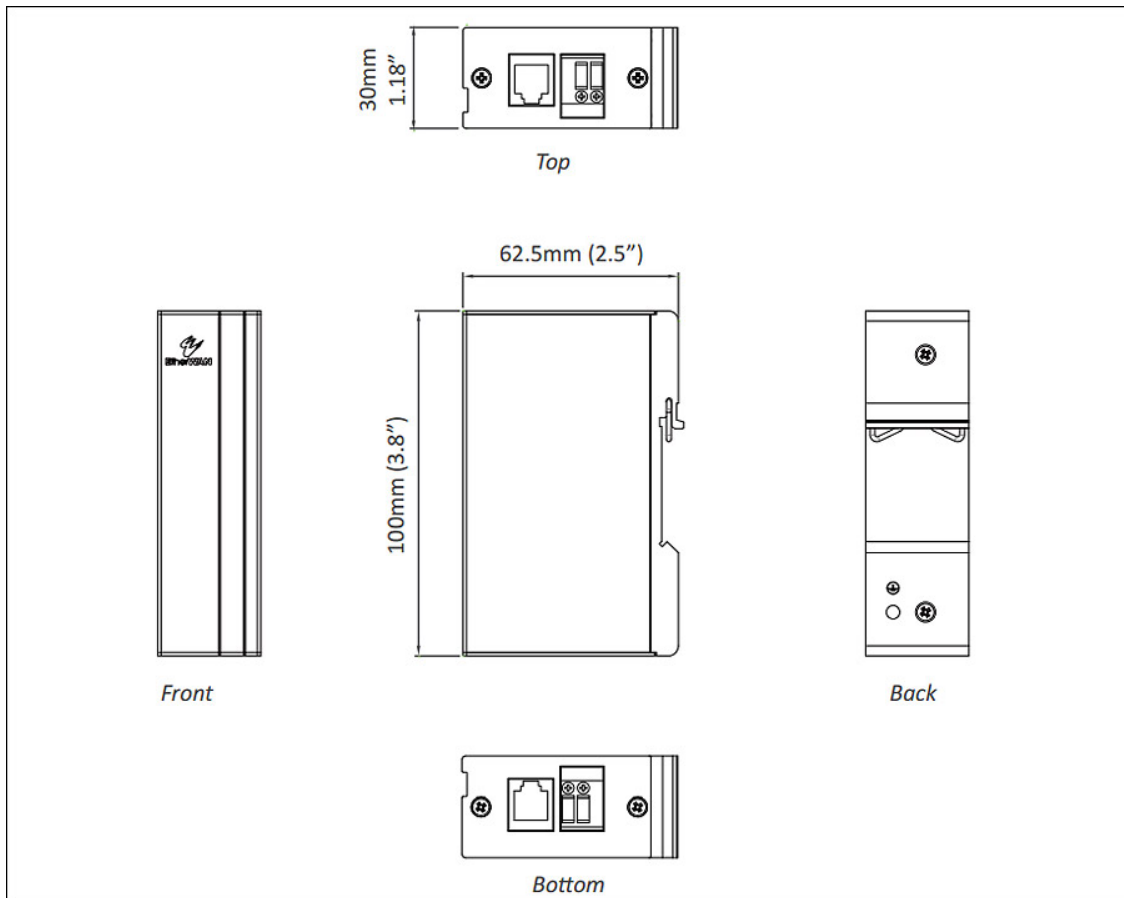
C1 (1kV/500A)

C2 (10kV/5kA) (Terminal Block)

C2 (6kV/3kA) (RJ11)

D1 (1kA)

## Dimensions



## Ordering Info

### + Model

<b>PD3041</b>	Hardened Surge Protection Device – RJ11 & Two Wire Terminal Block Type
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