

# PD1041

雙絞線/電話線 湧流保護器



## 產品介紹

EtherWAN's PD1041 Hardened Surge Protection Device is designed to protect your EtherWAN Switch investment; however any Ethernet network device can be protected from dangerous electrical surges. Designed for harsh environments, the PD1041 can be placed where you need it to protect your valuable network equipment.

EtherWAN — "When Connectivity is Crucial."

## 產品亮點

### Protection Solution Against Voltage Surge

- » Provides pair-to-pair protection through RJ45 connector

### Flexible Installation

- » Supports DIN-rail or desktop installation

### Wide Temperature Range

- » Provides -40 to 75°C operating temperature range for extreme environments

### Compatible with 10/100BASE-T, Gigabit and PoE products

- » Pass-through Data and PoE Power

## 產品規格

### Electrical

#### Maximum continuous operating voltage UC

- $\leq 3.3\text{VDC}$

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

- $\leq 3.3\text{VDC}$  ( $\pm 60\text{VDC}/\text{PoE+}$ )

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

- $\leq 180\text{VDC}$

#### Nominal current $I_N$

- $\leq 1.5\text{A}$  ( $25^\circ\text{C}$ )

#### Operating effective current $I_C$ at UC

- $\leq 1\mu\text{A}$

#### Residual current IPE

- $\leq 8\mu\text{A}$

#### Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Core)

- 100A

#### Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Earth)

- 2kA (per signal pair)

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

- 10kA

#### Nominal pulse current $I_{an}$ (10/700) $\mu\text{s}$ (Core-Core)

- $\leq 40\text{A}$

#### Nominal pulse current $I_{an}$ (10/700) $\mu\text{s}$ (Core-Earth)

- $\leq 160\text{A}$

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

- $\leq 85V$  (PoE)

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

- $\leq 700V$

**Output voltage limitation at 1kV/ $\mu$ s (Core-Core) static**

- $\leq 9V$

**Output voltage limitation at 1kV/ $\mu$ s (Core-Earth) static**

- $\leq 700V$

**Output voltage limitation at 100V/s (Core-Core)**

- $\leq 9V$

**Output voltage limitation at 100V/s (Core-Earth)**

- $\leq 300V$

**Output voltage limitation at 100V/ $\mu$ s (Core-Core)**

- $\leq 9V$

**Output voltage limitation at 100V/ $\mu$ s (Core-Earth)**

- $\leq 600V$

**Residual voltage at IN, (Conductor-Conductor)**

- $\leq 15V$
- $\leq 100V$  (PoE)

**Voltage protection level Up (Core-Core)**

- $\leq 9V$  (B2-1kV/25A)
- $\leq 100V$  (B2-1kV/25A-PoE)
- $\leq 15V$  (500V/100A)

**Voltage protection level Up (Core-Earth)**

- $\leq 600V$
- $\leq 700V$  (C2-4kV/2kA)

**Response time  $t_A$  (Core-Core)**

- $\leq 1\text{ns}$

**Response time  $t_A$  (Core-Earth)**

- $\leq 100\text{ns}$

**Input attenuation  $a_E$ , sym.**

- 1dB ( $\leq 250\text{MHz}$ )

**Near-end crosstalk attenuation**

- $\leq 35\text{dB}$  (At 250MHz/100 $\Omega$ )

**Cut-off frequency  $f_g$  (3dB), sym. in 100 Ohm system**

- $> 500\text{MHz}$

**Capacity (Core-Core)**

- typ. 5pF ( $f=1\text{MHz}/V_R=0\text{V}$ )

**Capacity (Core-Earth)**

- typ. 2pF ( $f=1\text{MHz}/V_R=0\text{V}$ )

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

- B2 (1kV/25A)

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

- B2 (4kV/100A)
- C2 (4kV/2kA)
- D1 (1kA)

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## 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**

- DIN-Rail

### **Connection**

- RJ45 Connector
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## **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)
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## **Regulatory Approvals**

### **ISO**

- Manufactured in an ISO 9001 facility

### **Safety**

UL 497B

### **EMI**

CE

FCC Part 15 Class B

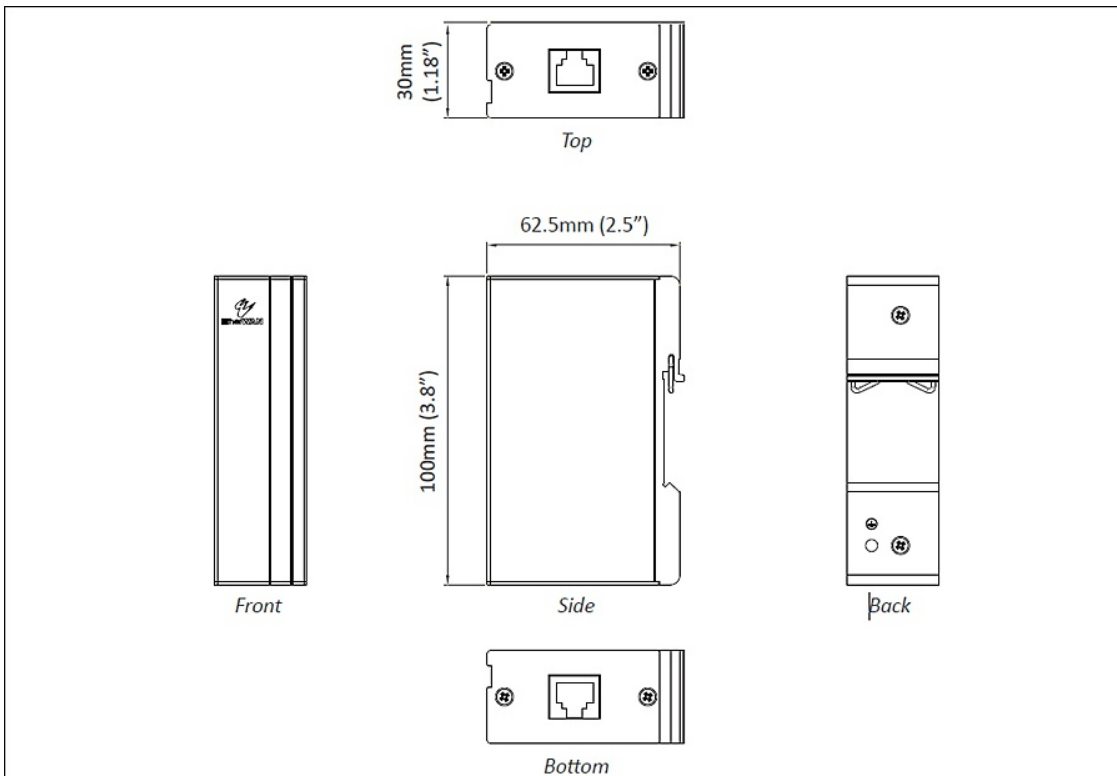
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### **Industrial Compliance**

IEC 61643-21

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## 產品尺寸圖



## 訂購型號

### Model

**PD1041**

Hardened Surge Protection Device – RJ45

\* Note: Cat.6 cable is recommended.

