

PD3041

Hardened Surge Protection Device – RJ11 & Two Wire Terminal Block



Overview

EtherWAN's PD3041 Hardened Surge Protection Device is designed to protect your DSL phone line applications from dangerous electrical surges. Designed for harsh environments, the PD3041 can be placed where you need it to protect your valuable network equipment.

Spotlight

- **Protection Solution Against Voltage Surge**
 - Provides pair-to-pair protection through RJ11 connector & terminal block
- **Flexible Installation**
 - Supports DIN-rail or desktop installation
- **Wide Temperature**
 - Provides -40°C to 75°C operating temperature range for extreme environments

Hardware Specifications

Electrical

Maximum continuous operating voltage UC

- $\leq 185\text{VDC}$

Maximum continuous voltage UC (wire-wire)

- $\leq 185\text{VDC}$

Maximum continuous voltage UC (wire-ground)

- $\leq 185\text{VDC}$

Nominal current IN

- $\leq 380\text{mA}$ (25 °C)

Operating effective current IC at UC

- $\leq 6\ \mu\text{A}$

Residual current IPE

- $\leq 4\ \mu\text{A}$

Nominal discharge surge current In (8/20) μs

(Core-Core)

- $\leq 5\ \text{kA}$

Nominal discharge surge current In (8/20) μs

(Core-Earth)

- $\leq 5\ \text{kA}$

Total surge current (8/20) μs

- $10\ \text{kA}$

Nominal pulse current Ian (10/1000) μs (Core-Core)

- $\leq 100\text{A}$

Nominal pulse current Ian (10/1000) μs (Core-Earth)

- $\leq 100\text{A}$

Nominal pulse current Ian (10/700) μs (Core-Core)

- $\leq 150\text{A}$

Nominal pulse current Ian (10/700) μs (Core-Earth)

- $\leq 150\text{A}$

Output voltage limitation at 1 kV/ μs (Core-Core) spike

- $\leq 250\ \text{V}$

Output voltage limitation at 1 kV/ μs (Core-Earth) spike

- $\leq 250\ \text{V}$

Residual voltage at In, (conductor-conductor)

- $\leq 120\ \text{V}$

Residual voltage at In, (conductor-ground)

- $\leq 120\ \text{V}$

Voltage protection level UP (Core-Core)

- $\leq 250\ \text{V}$ (B2 – 100A)
- $\leq 300\ \text{V}$ (C1 – 500A)
- $\leq 250\ \text{V}$ (C2 – 5kA)

Voltage protection level UP (Core-Earth)

- $\leq 250\ \text{V}$ (B2 – 100A)
- $\leq 250\ \text{V}$ (C1 – 500A)
- $\leq 600\ \text{V}$ (C2 – 5kA)

Response time tA (Core-Core)

- $\leq 100\ \text{ns}$

Response time tA (Core-Earth)

- $\leq 100\ \text{ns}$

Input attenuation aE, sym.

- Typ. 0.5 dB ($\leq 5\ \text{MHz}$)
- Typ. 0.3 dB ($\leq 8\ \text{MHz} / 150\ \Omega$)
- Typ. 0.3 dB ($\leq 2.5\ \text{MHz} / 600\ \Omega$)

Near-end crosstalk attenuation

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

Cut-off frequency fg (3 dB), sym. in 100 Ohm system

- Typ. 50 MHz

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 / 5 kA) (Terminal block)
- C2 (6kV / 3kA) (RJ11)
- D1 (1 kA)

Mechanical

Casing

- Aluminum case
- IP30

Dimensions

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

Weight

- $184\text{g} \pm 10\%$

Installation

- RJ11 connector/ Terminal Block

Environment

Operating Temperature

- -40°C to 75°C (-40°F to 167°F)

Storage Temperature

- -40°C to 85°C (-40°F to 185°F)

Humidity

- 5% to 95%, non-condensation

Regulatory Approvals

ISO

- Manufactured in an ISO9001 facility

EMI

- CE
- FCC Part 15 Class B
- VCCI

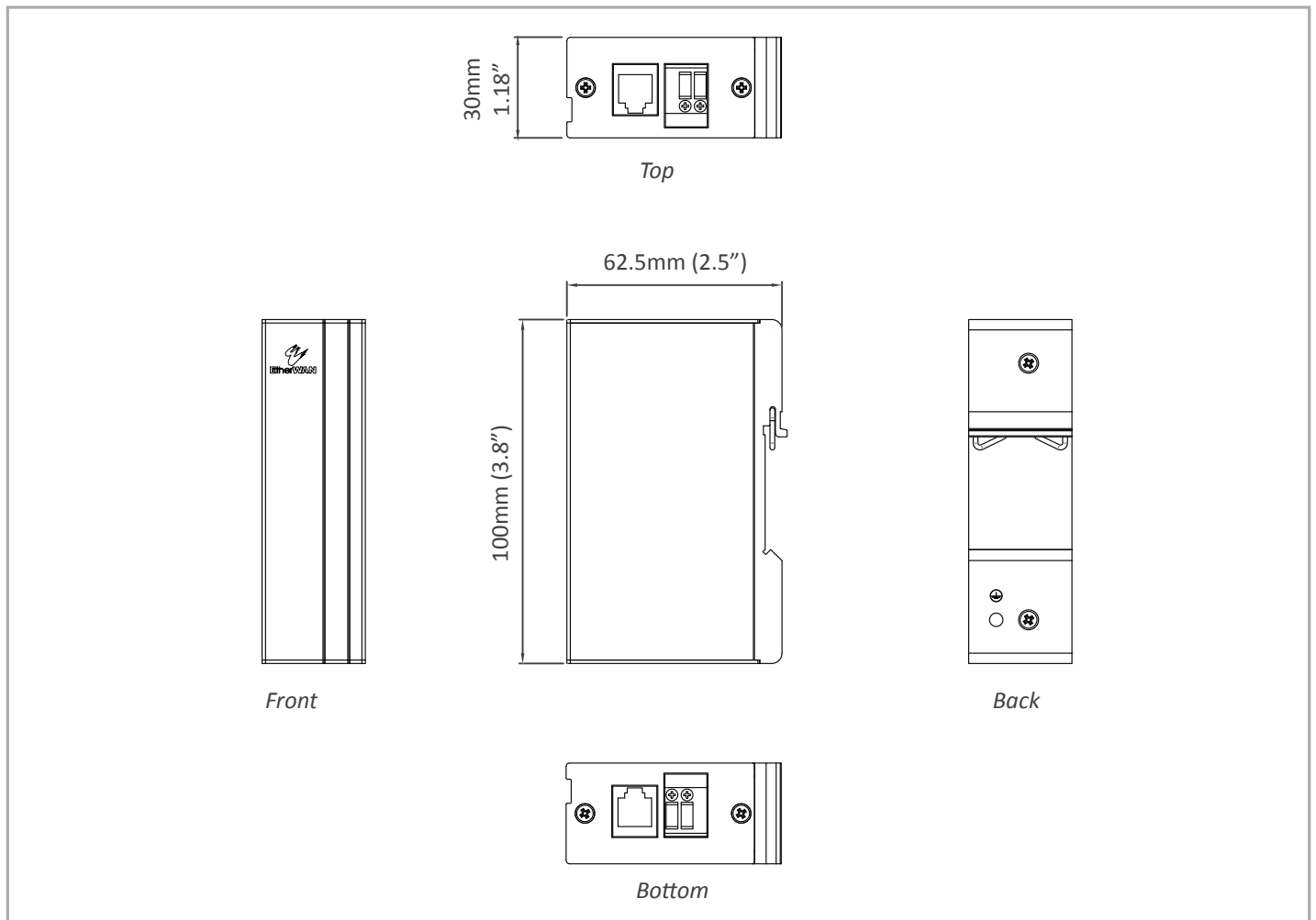
TUV

- IEC61643-21

UL

- UL497B

Dimensions



Ordering Information

Model

PD3041

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