

### **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 IN

≤380mA (25°C)

Operating effective current IC at UC

≤6μΑ

RResidual current IPE

≤4µA

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

(Core-Core)

≤5kA

Nominal discharge surge current In (8/20) µs

(Core-Earth)

≤5kA

Total surge current (8/20) µs

10kA

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

Core)

≤100A

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

Earth)

≤100A

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

Core)

≤150A

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

Earth)

≤150A

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

spike

≤250V

2



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

≤250V

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

≤120V

Residual voltage at In, (Conductor-Ground)

≤120V

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

≤300V (B2-100A)

≤300V (C1-500A)

≤300V (C2-5kA)

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

≤300V (B2-100A)

≤300V (C1-500A)

≤300V (C2-5kA)

Response time tA (Core-Core)

≤100ns

Response time tA (Core-Earth)

≤100ns

Input attenuation aE, sym.

Typ. 0.5dB (≤5MHz)

Typ. 0.3dB (≤8MHz/150Ω)

Typ. 0.3dB (≤2.5MHz/600Ω)

Near-end crosstalk attenuation

≤35dB (At 250MHz/100Ω)

Cut-off frequency fg (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)

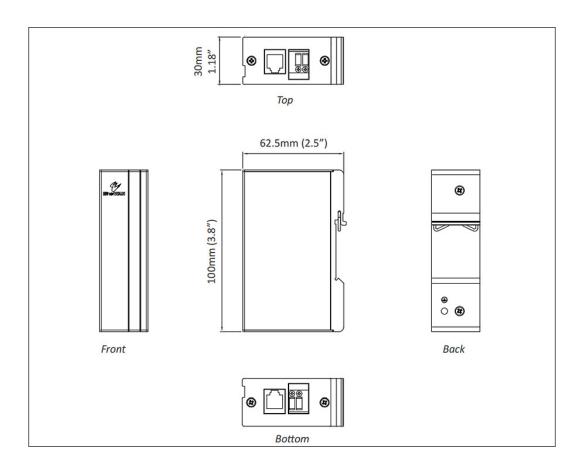
C2 (10kV/5kA) (Terminal Block)

C2 (6kV/3kA) (RJ11)

D1 (1kA)



## **Dimensions**



## **Ordering Info**



PD3041

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



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