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

Provides pair-to-pair protection through RJ11 connector & terminal block

+ Wide Operating Temperature Range

Operates in temperatures from -40 to 75°C, with throughput under 100Mbps

+ Flexible Installation

Supports DIN-rail or desktop installation

Specifications

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
≤6μA

RResidual current IPE
≤4μA

Nominal discharge surge current In (8/20) μs (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

Output voltage limitation at 1kV/μs (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

3.3Ω ±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)

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

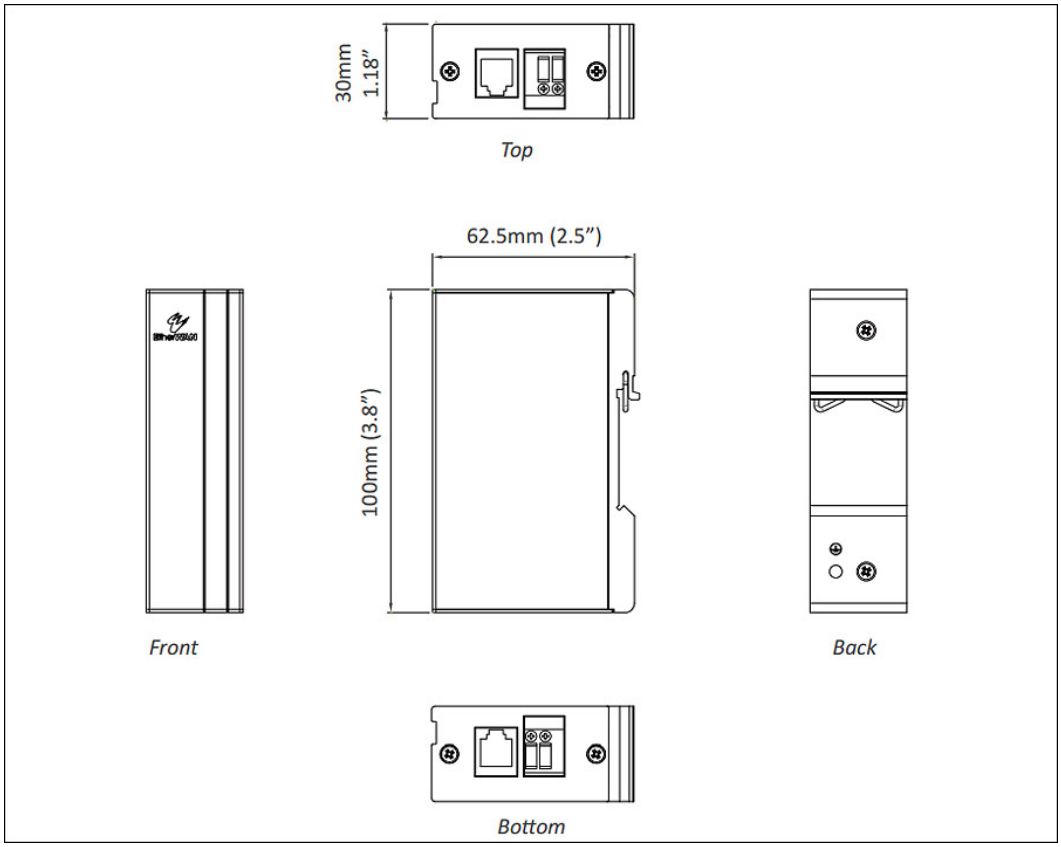
FCC Part 15 Class B

VCCI

Industrial Compliance

IEC 61643-21

Dimensions



Ordering Info

Model

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