

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

+ 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 I_N
 $\leq 380\text{mA}$ (25°C)

Operating effective current I_C at UC
 $\leq 6\mu\text{A}$

Residual current IPE
 $\leq 4\mu\text{A}$

Nominal discharge surge current I_n (8/20) μs
(Core-Core)
 $\leq 5\text{kA}$

Nominal discharge surge current I_n (8/20) μs
(Core-Earth)
 $\leq 5\text{kA}$

Total surge current (8/20) μs
10kA

Nominal pulse current I_{an} (10/1000) μs (Core-
Core)
 $\leq 100\text{A}$

Nominal pulse current I_{an} (10/1000) μs (Core-
Earth)
 $\leq 100\text{A}$

Nominal pulse current I_{an} (10/700) μs (Core-Core)
 $\leq 150\text{A}$

Nominal pulse current I_{an} (10/700) μs (Core-Earth)
 $\leq 150\text{A}$

Output voltage limitation at 1kV/ μs (Core-Core)
spike
 $\leq 250\text{V}$

Output voltage limitation at 1kV/ μs (Core-Earth)
spike
 $\leq 250\text{V}$

Residual voltage at I_n , (Conductor-Conductor)
 $\leq 120\text{V}$

Residual voltage at I_n , (Conductor-Ground)
 $\leq 120\text{V}$

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 t_A (Core-Core)
≤100ns

Response time t_A (Core-Earth)
≤100ns

Input attenuation a_E , 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 f_g (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

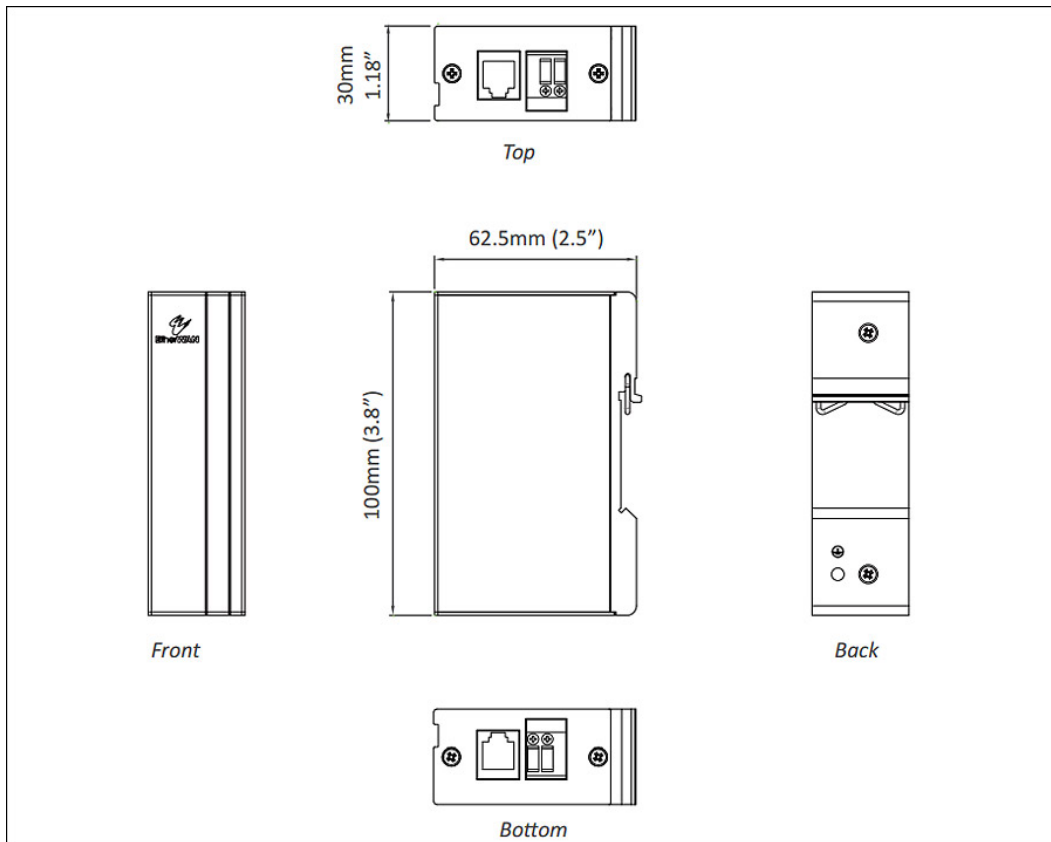
ISO
Manufactured in an ISO 9001 facility

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

