



ComNet™ model PS48VDC-10A is a high-quality, low-noise switching mode power supply ideally suited to those applications requiring PoE (Power over Ethernet). This rugged unit may be either DIN-rail or shelf-mounted, providing an identical mounting configuration to the mating PoE switch. Up to 24 PoE field devices may be powered from a single supply, and the high output current capacity provides an adequate safety margin. A maximum of three of these units may be paralleled together to triple the number of PoE devices supported. The wide ambient operating temperature range permits installation in most out-of-plant and unconditioned environments, such as those found in intelligent transportation systems or factory automation/industrial control applications. Unconditional line and load protection is provided.

FEATURES

- › Universal AC input: 90 to 264 VAC, 47-63Hz
- › Mounts on standard 7.5 or 15 mm DIN-rail
- › Automatic power factor correction (PFC)
- › High operating efficiency; up to 90%
- › Small package for limited space installations
- › Natural convection cooling; no troublesome fans

APPLICATIONS

- › Power Supply for Ethernet Switches with PoE

SPECIFICATIONS

Electrical

Line regulation	± 0.5%
Load regulation, Non-parallel mode	± 0.5%
Load regulation, Parallel mode	± 5%
Output Voltage accuracy	1% (factory adjusted)
Ripple and Noise	100 mV
Hold up time $V_i = 230V_{ac}$	30 ms
Minimum load	0%
Parallel Operation	3 units max.

Input Data

Rated input voltage range	
AC	90 - 264 Vac
DC	120 - 370 Vdc
Rated input current (115/230 VAC)	7 / 3.5A
Frequency range	47 to 63 Hz
Inrush current	
$V_i = 115V_{ac}$	25A
$V_i = 230V_{ac}$	50A

Controls and Protections

Input Fuse	T10A/250 VAC internal ¹
Output Overvoltage Protection	57 to 63 VDC
Output Short Circuit Protection	Current limit
Rated Overload Protection	120-140%

[1] When S/P switch is set to parallel, it is not possible to trim output voltage.

[2] For complete compliance information contact ComNet for manufacturer's data sheet.

General Data

(@ Nominal Line, Full Load, 25°C)

Ambient operating temperature	-25° to +71°C
Derating (>56°C to +71°C)	2.5%/°C
Ambient humidity	20 - 95%RH, non-condensing
Storage	-25° to +85°C
Dimensions L × W × D	
screw terminal connector:	4.9 × 6.9 × 4.8 in (12.5 × 17.5 × 12.3 cm)
plug connector version:	5.6 × 6.9 × 4.8 in (14.2 × 17.5 × 12.3 cm)
Cooling	Natural convection
Case material	Aluminium, Powder Coat Finish
Weight	< 4.3 lb / 1.9 kg
Protection	IP20

Approvals And EMC Compliance²

Insulation voltage I/O	3.000Vac
Insulation resistance I/O @ 500VDC	100Mohm
UL / cUL	UL508 listed, UL60950-1, Recognised
TUV	EN60950-1
CE	EN61000-6-3
	EN55022 class B
	EN61000-3-2
	EN61000-3-3
	EN61000-6-2
	EN55024



Pin Assignment and Front Controls

Pin #	Designation	Description
1	+	Positive output terminal
2	+	Positive output terminal
3	-	Negative output terminal
4	-	Negative output terminal
5	GND	Ground terminal to minimise High frequency emissions
6	L	Phase input (no polarity with DC input)
7	N	Neutral input (no polarity with DC input)
	DC ON	DC output ready LED
	DC LO	DC low indicator LED
	Vout ADJ.	Trimmer for fine output voltage adjustment
	S/P	Single parallel selection switch

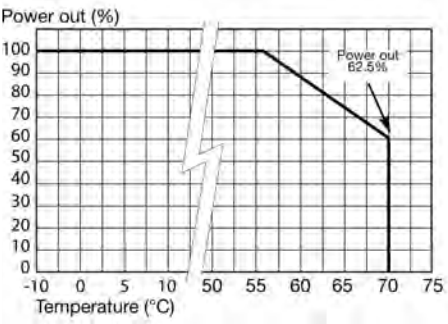
SPECIFICATIONS

Installation

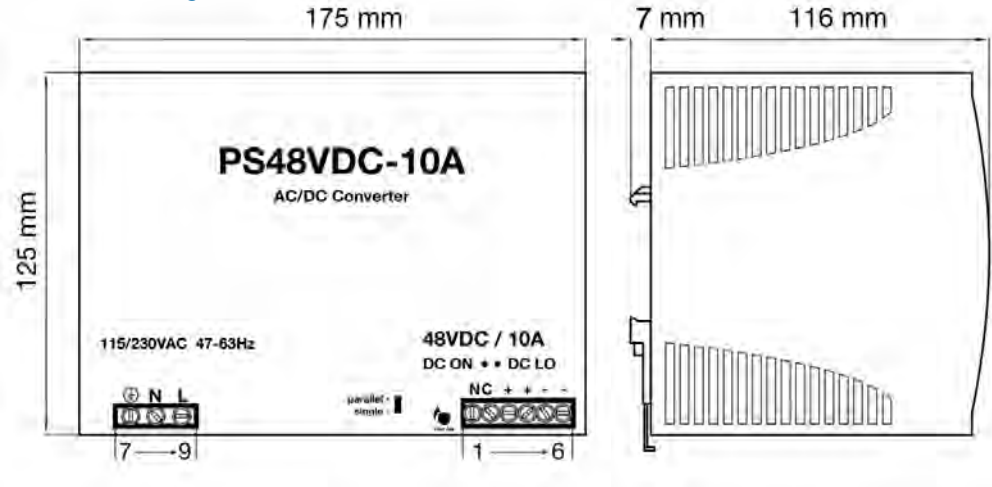
Cooling	Natural air convection Allow 25 mm of free space along all sides to ensure adequate cooling
Screw Connections	10 to 24AWG Flexible or solid cable
Plug In Connectors	10 to 24AWG Flexible or solid cable

NOTE: Specify desired connector style at time of order.

Derating Diagram



Outline Drawing



ORDERING INFORMATION

Part Number	Output	Voltage Trim Range ¹		DC OK @ Start Up (VDC)		DC Low After Start Up (VDC)		Typical Efficiency
	Current (A)	Min. VDC	Max. VDC	Min.	Max.	Min.	Max.	
PS48VDC-10A		10	47.0	56.0	37.0	40.0	37.0	40.0 90%

[1] When S/P switch is set to parallel, it is not possible to trim output voltage.

OPTIONAL FEATURES

Code	Description
B	Plug-in connectors