

Switching Mode Power Supply 240 watt DIN-rail mounting for Power Over Ethernet (POE) Applications



Description

ComNet™ model PS48VDC-5A 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 10 POE field devices may be powered from a single supply, and the high output current capacity provides an adequate safety margin. 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.

Applications

- Power Supply for Switches supporting PoE

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 85%
- Small package for limited space installations
- Natural convection cooling; no troublesome fans

specifications

OUTPUT DATA

Line regulation	± 0.5%
Output Voltage accuracy	+1% (factory adjusted)
Ripple and Noise	150 mV peak to peak

Hold up time $V_i = 230\text{Vac}$	24 ms
Minimum load	0%

INPUT DATA

Rated input voltage range	
AC	90 - 264 Vac
DC	120 - 370 Vdc
Rated input current (115/230 VAC)	2.8 / 1.4A
Frequency range	47- 63 Hz
Inrush current	
$V_i = 115\text{Vac}$	22
$V_i = 230\text{Vac}$	45

INSTALLATION

COOLING	Natural air convection Allow 25mm of free space along all sides to ensure adequate cooling
SCREW CONNECTIONS	10-24AWG Flexible or solid cable
PLUG IN CONNECTORS	10-24AWG Flexible or solid cable

NOTE: Specify desired connector style at time of order.

ORDERING INFORMATION

PART NUMBER	OUTPUT CURRENT (A)	VOLTAGE TRIM RANGE*		TYPICAL EFFICIENCY
		MIN. VDC	MAX. VDC	
PS48VDC-5A	5	48.0	53.0	85%
Options	Add "B" to the part number for Plug-in connectors			

CONTROLS AND PROTECTIONS

Input Fuse	T5A/250Vac internal*
Output Overvoltage Protection	54 – 60VDC
Output Short Circuit Protection	Current limit
Rated Overload Protection	105-150%

GENERAL DATA

(@ NOMINAL LINE, FULL LOAD, 25°C)

Ambient operating temperature	-10°C to 70°C
Derating (>56°C to +71°C)	2.5%/°C
Ambient humidity	20 - 90%RH, non-condensing
Storage	-20°C to +85°C
Dimensions L x W x D	10 x 12.5 x 12.5 cm 4 x 5 x 5 in
Cooling	Natural convection
Case material	Aluminium, Powder Coat Finish
Weight	< 1.2 Kg (3.3 lbs)

APPROVALS AND EMC COMPLIANCE*

Withstand Voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG,O/P-FG:100M Ohms/500VDC
UL / cUL	UL508, UL60950-1 approved
TUV	EN60950-1 approved
CE	EN55011 EN55011 (CISPR22) Class B EN61000-3-2,-3 EN61000-4-2,3,4,5,6,8,11 EN50204 EN55024 EN61000-6-2, heavy industry level, criteria A

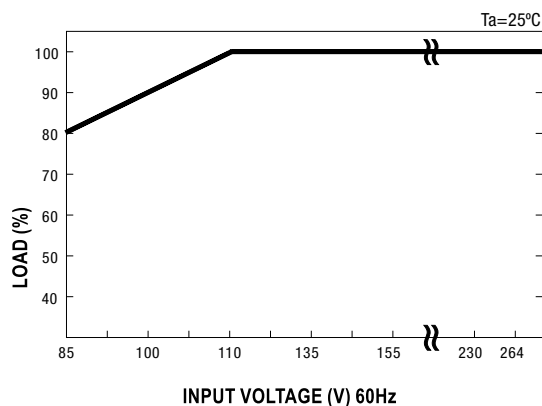
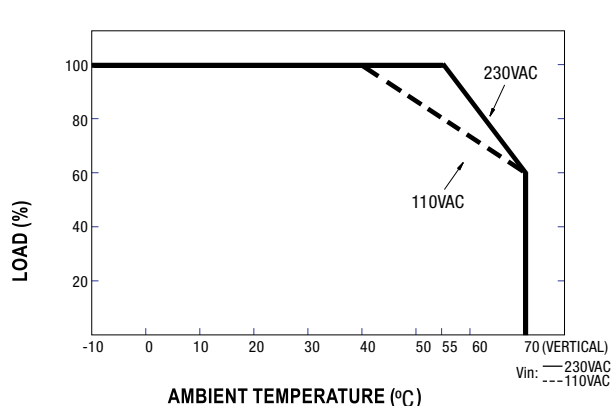
* For complete compliance information contact ComNet for manufacturer's data sheet.



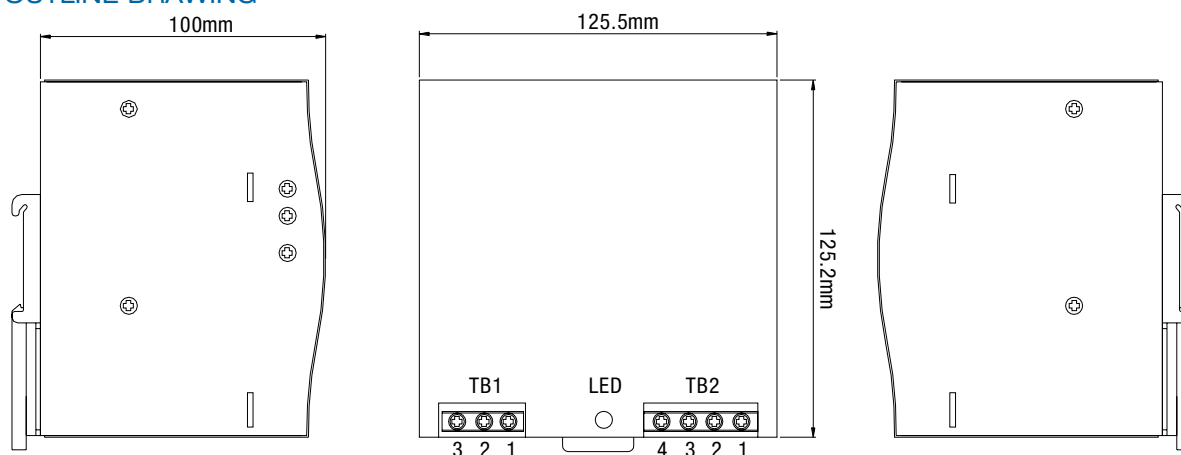
TERMINAL PIN ASSIGNMENT

	PIN #	DESIGNATION
TB1	1	FG
	2	AC/N
	3	AC/L
TB2	1,2	DC OUTPUT +V
	3,4	DC OUTPUT -V

DERATING DIAGRAM



OUTLINE DRAWING



Specifications are subject to change without notice.