



PS-145W-12V

Enclosed AC-to-DC Power Supply

UNIT CODE	DESCRIPTION
PS-145W-12V	145 Watt, 12V, Single Output Enclosed Switching AC-to-DC Transformer

SPECIFICATIONS	
Input	Output
Universal AC input 88-132 or 176-264VAC (selectable by switch)	+12VDC@0-12A

Features at a Glance:

- AC input range selectable by switch
- Protections: Short circuit / Overload & Over voltage
- Fixed switching frequency at 25KHz
- Cooling by natural convection
- 100% full load burn-in test
- Low cost, high reliability
- MTBF: **286.7K hrs min.** MIL-HDBK-217F (25°C / 77°F)
- AC input voltage range: 88-132VAC/ 176-264VAC selectable by switch
- AC inrush current: Cold start, 35A at 230VAC
- DC adjustment range: ±10% rated output voltage
- Overload protection: 125%-165% shut off, AC recycle to re-start
- Over voltage protection: 112%-135% rated output voltage
- Setup, rise, hold up time: 100ms, 50ms, 20ms at full load and 230VAC
- Withstand voltage: I/P-O/P:1.5KVAC, I/P-FG:1.5KVAC, 1minute
- Working temperature: -10-60°C (14-140°F) (refer to output derating curve)
- Safety standards: Design refer to UL1012
- EMC standards: Design refer to EN55022, IEC801-2,3,4
- Connection: 7P/ 9.5mm pitch terminal block
- Weight: 1.5 lbs. (0.71 kg.)
- Dimensions: Case 902: 7.8"L X 3.9"W X 1.5"H
199 x 98 x 38 mm

1 year warranty



PS145-12V is an economical, compact, enclosed AC-to-DC power supply (transformer) perfect for many applications. About the size of a paperback book this small unit has many features that you will typically only find on larger, more expensive models elsewhere.

PS145-12 will work anywhere. Simply select 115V or 230V AC input by switch and your ready to go. These "switchers" derive their impressive reliability from a conservative design, and 100% full-load burn-in.

Pricing: 1+ \$ 69.00
10+ \$ 59.00
100+ \$ 49.00

electracool.com



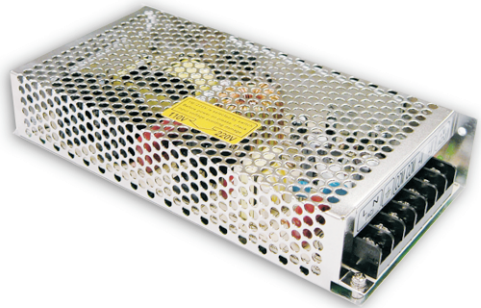
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Nashua, NH 03060 USA

For Information Call

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international Inquiries (603) 888-2467
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■ Features :

- AC input range selectable by switch
- Protections: Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 25KHz
- LED indicator for power on
- Made in China for low cost
- High reliability
- 1 year warranty

SPECIFICATION

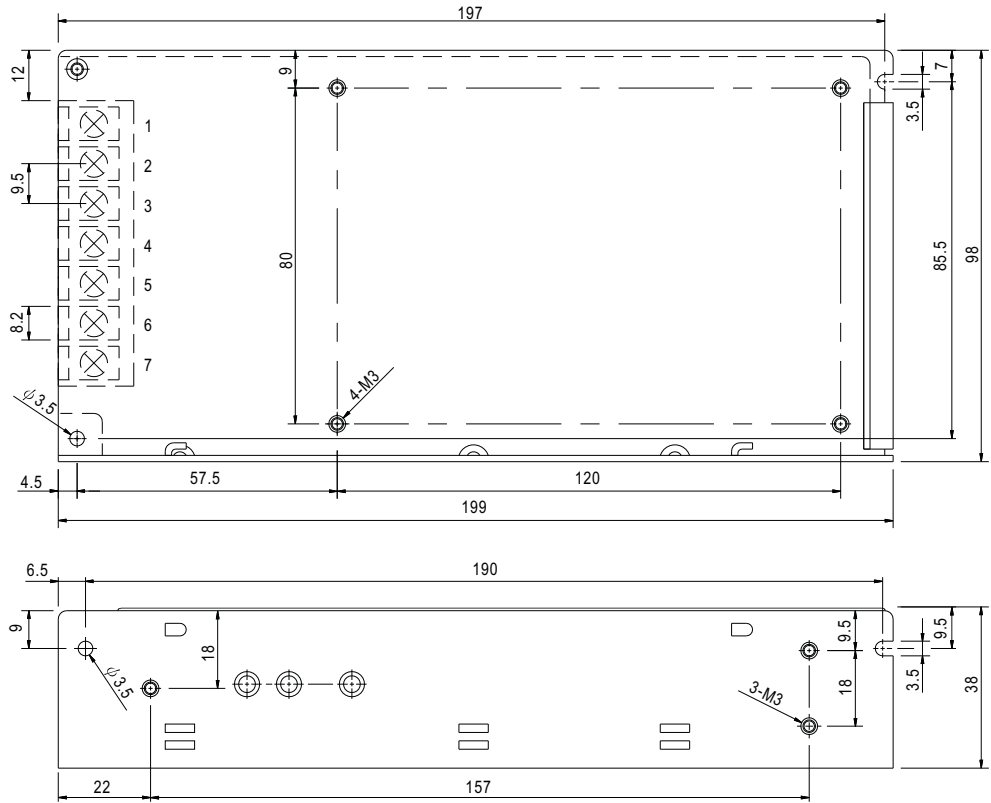
MODEL	S-145-5	S-145-7.5	S-145-12	S-145-15	S-145-24	
OUTPUT	DC VOLTAGE	5V	7.5V	12V	15V	24V
	RATED CURRENT	25A	18A	12A	9.6A	6A
	CURRENT RANGE	0 ~ 25A(30A max.)	0 ~ 18A(21A max.)	0 ~ 12A(14A max.)	0 ~ 9.6A(11A max.)	0 ~ 6A(7A max.)
	RATED POWER	125W	135W	144W	144W	144W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	6 ~ 8.3V	10.6 ~ 13.2V	13.2 ~ 16.5V	21 ~ 28V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
SETUP, RISE, HOLD TIME	100ms, 50ms, 20ms at full load					
INPUT	VOLTAGE RANGE	88 ~ 132VAC/176 ~ 264VAC selected by switch				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY (Typ.)	78%	80.5%	80.5%	81%	83.5%
	AC CURRENT	3.2A/115VAC 1.6A/230VAC				
	INRUSH CURRENT (max.)	COLD START 35A				
	LEAKAGE CURRENT	<3.5mA / 240VAC				
PROTECTION	OVER LOAD	125 ~ 165% rated output power Protection type : Shut down o/p voltage, re-power on to recover				
	OVER VOLTAGE	5.6 ~ 6.8V	8.6 ~ 10V	13.8 ~ 16.2V	17.3 ~ 20.3V	29 ~ 32V
		Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1012				
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC 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				
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B				
	EMS IMMUNITY	Compliance to IEC801-2,3,4 Light industry level, criteria A				
OTHERS	MTBF	286.7K hrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	199*98*38mm (L*W*H)				
	PACKING	0.71Kg; 30pcs/22.5Kg/1.22CUFT				
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. C3,4,22,41,63,140,141 must be removed. 5. Refer to output derating curve us input voltage. 					

Mechanical Specification

Case No. 902 Unit:mm

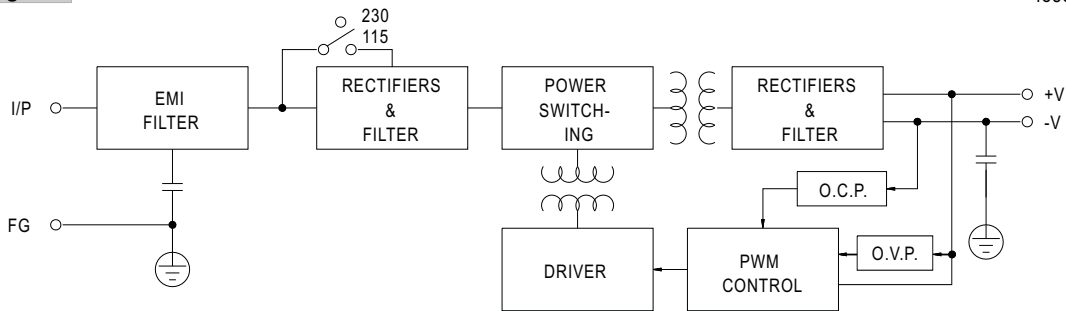
Terminal Pin. No Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG \perp
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

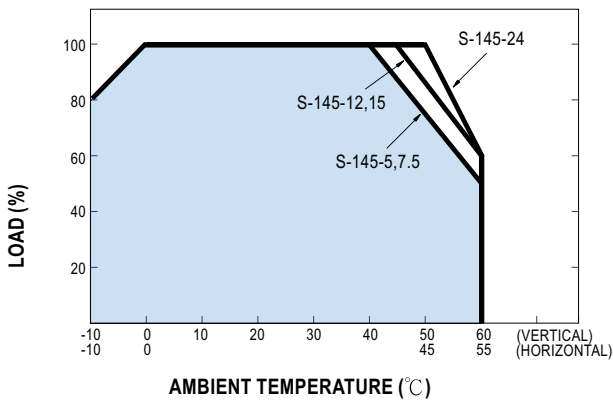


Block Diagram

fosc : 25KHz



Derating Curve



Static Characteristics (24V)

