

Description

The **PS-150** is a 150 W regulated switching power supply that is available with 12 V (12.5 A) or 24 V (6.5 A) output. Both versions are mechanically identical. This enclosed AC to DC switching power supply provides a reliable, compact and light weight power source for a variety of applications including motors, controllers, automation, robotics and motion control.

Each **PS-150** provides a single 1% regulated DC output from zero to the maximum load of 150 Watts. Over voltage, current limit and short circuit protection are built in. There are no internal fuses. If the current limit is exceeded, the supply shuts down until AC power is removed. It automatically resets when AC power is restored. The power supplies cannot be damaged by shorting the outputs. Operation from either 110V or 220V AC line input voltage can be selected with a single switch.

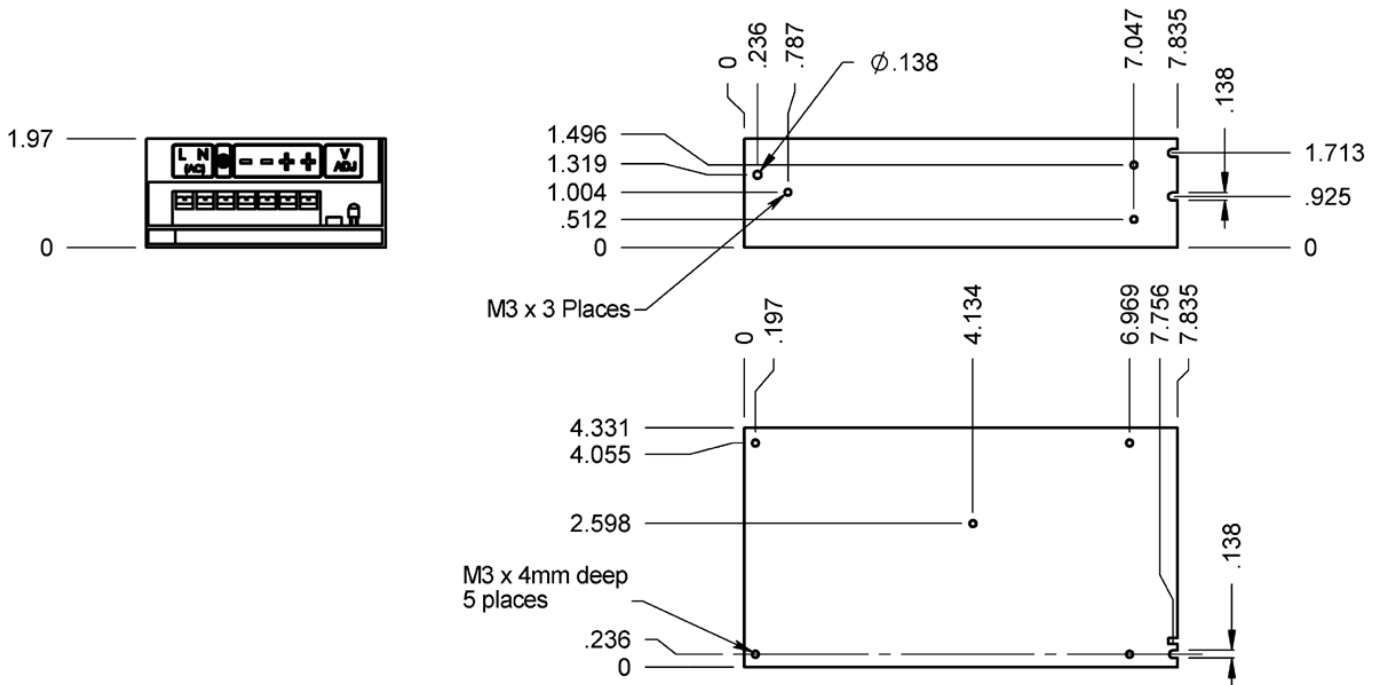
The **PS-150** is UL certified and CE marked to verify safe, reliable operation. Due to its 85% efficiency, the 24V version requires no additional cooling or heat sinking. The 12V version is de-rated to 10A if no cabinet cooling is provided.



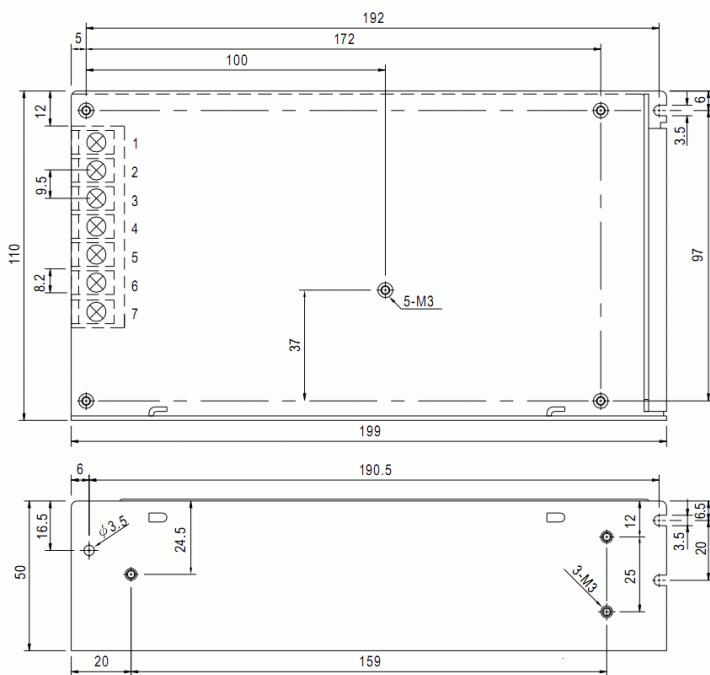
Features

- ▶ Low cost, high reliability
- ▶ International AC input range
- ▶ Built in EMI filter, low ripple
- ▶ High efficiency, low working temperature
- ▶ Short circuit, overload and overvoltage protected
- ▶ Compact size, light weight
- ▶ 100% full load burn-in tested
- ▶ DIN rail mounting option
- ▶ CE and UL approved

Mech. Sheet 1



Mech. Sheet 2



Terminal Pin No. Assignment

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

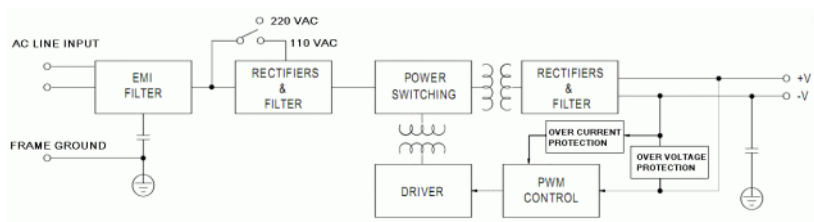
Electrical Specifications

Parameter	12V output	24V output
Input Voltage	88-132 VAC or 176-264VAC switch selectable	88-132 VAC or 176-264VAC switch selectable
Input Frequency	47 to 63 Hz	47 to 63 Hz
Output Voltage	12 VDC \pm 1%	24 VDC \pm 1%
Voltage Adj. Range (typ.)	10.6 - 13.2 V	21 - 28 V
Rated Current	12.5 A	6.5 A
Efficiency (typ.)	82%	85%
Ripple & Noise (max.)	\pm 180mV	\pm 240mV
Line or Load Regulation	\pm 0.3%	\pm 0.2%

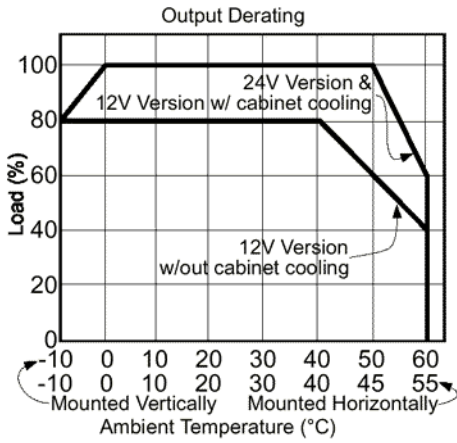
Safety/Environmental Specs.

Parameter	Rating
Protection	Overload, Overvoltage, Short-circuit (power cycle to recover)
Working Temperature	-10 to 60 C (see Output Derating plot)
Working Humidity	20 to 90 % non-condensing
Storage Conditions	-20 to 85 C, 10 to 90 % RH
Safety Standards	UL1012, UL60950-1, TUV EN60950-1 approved
Voltage Protection	I/P-O/P:3 kVAC, I/P-FG: 1.5 kVAC, O/P -FG: 0.5 kVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100 MOhms (500 VDC, 25 C, 70 % RH)
EMI	EN55022 (CISPR22) Class B compliant
EMS	EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A compliant
Harmonic Current	EN61000-3-2,-3 compliant
MTBF (min.)	286.7 Khours (25 C) per MIL-HDBK-217F

Block Diagram



Output Derating



Note: cabinet cooling referred to in this graph means the power supply is mounted in a cabinet that has a 20 CFM fan.

Ordering Information

PS-150 -

Voltage

12 =

24 =

Notes

- ▶ Cables and connectors are not included and must be ordered separately.
- ▶ US Digital warrants its products against defects in materials and workmanship for two years. See complete warranty for details.
- ▶ Mounting kit is not included and must be ordered separately

Base Pricing

Quantity	Price
1	\$82.95
10	\$72.45

For volume discounts, please contact us at sales@usdigital.com or 800.736.0194.