



IPD50 SERIES CLASS I

50 Watt ITE Desktop Power Supply

- Safety Approval IEC62368-1 Class I
- High Efficiency: Level VI
- High Power Density 3.41W/in³
- Hold-up Time >10ms at full load
- Fully Regulated DC output
- DOE&CEC&ERP Directive Compliant
- **LED** Indicator
- Grounded Output (12V Floating Output)
- 1-Year Limited Warranty

INPUT		
Input Voltage	85 – 264VAC (100 – 240VAC Nominal)	
Input Frequency	47 – 63Hz (50-60Hz Rated)	
Input Current	<0.8A rms	
Inrush Current	<60A at 230VAC cold start	
Power Factor	N/A	
Zero Load Power	<0.15W	
Earth Leakage Current (Typical)	N/A	
Touch Leakage Current	<0.25mA@264Vac 60Hz (typical) Accessible parts and circuits not connected to PE	

OUTPUT	
Output Voltage	See Table
Total Regulation	±5%
Minimum Load	No minimum load required
Start-Up Delay	<2.0s
Hold-Up Time	>10ms at any input voltage of full load
Ripple & Noise	<1% pk-pk **
Over Voltage Protection	110 – 150%
Over Temperature Protection	Active – Recoverable Passive - Non recoverable
Over Current Protection	108 – 180%
Short Circuit Protection	Shutdown, auto-restart (hiccup mode)

Notes ** Ripple and noise measured with 20MHz bandwidth; $10\mu F$ tantalum capacitor in parallel with a $0.1\mu F$ ceramic capacitor.

Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
IPD5012-760	12.0V	4.16A	5.0A	±5%	88%
IPD5015-760	15.0V	3.33A	4.0A	±5%	90%
IPD5018-760	18.0V	2.78A	3.33A	±5%	90%
IPD5019-760	19.0V	2.63A	3.15A	±5%	90%
IPD5024-760	24.0V	2.08A	2.5A	±5%	90%

Notes

- 1) Maximum peak load (60W) lasting 500ms with a maximum 10% duty cycle.
- $2) \ Includes \ initial \ setting, \ line \ regulation, \ load \ regulation, \ and \ thermal \ drift.$
- 3) Typical at 115VAC (including output cable).
- 4) AC cord not included-AC cord part number 67400-185-EB can be ordered separately.

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General	
Efficiency	Avg. Efficiency 89.0% @ 115VAC; Avg. Efficiency 89.0% @ 230VAC;
MTBF	min. 100,000 hours, SR-332 issue 3
Size	4.50" (114.2mm) x 2.26" (57.5mm) x 1.44" (36.5mm)
Weight	0.44 LBS (0.20 Kg)
Power Density	3.41W/in ³

Environmental		
Operating Temperature	0–60°C (Full load to 40°C, derate linearly to 50% load at 60°C)	
Storage Temperature	-40°C to +85°C	
Relative Humidity	5-93%, non-condensing	
Cooling	Natural Convection	
Vibration	Unites meet MIL-STD-810G Figure 514.6C-1 category 4	
Altitude (Operating)	Rated to 5000M	

EMC & Safety		
Emissions	FCC class B, EN55035:2017 EN55032:2015+A11:2020	
Immunity	EN61000-4-2, -3, -4, -5, -6, -11	
Certified by TUV to the following:	cTUVus	
	UL62368-1:2014	
	CAN/CSA-22.2 No.62368-1-14	
	CB per IEC 62368-1:2014	
	DOE EPS Energy efficiency (Level VI), EU CoC Energy efficiency (Level VI), EU ErP directive	
	CE marked to LVD and CE EMC	

Input & Output Configuration		
Standard Input Cable	Not Provided Separately (P/N 67400-185-EB)	
Connection on Power Supply Body	IEC 320 C6 Receptacle	
Standard Output Cable	4ft	
Output Cable Cord Size	2x16awg (12V) 2x18awg (15V, 18V, 19V, 24V)	
Output Cable Connector	Switchcraft 760 or equivalent	
Output Cable Mating Connector	Switchcraft 712A or equivalent	

Output Pin Assignments		
Center	+V1	
Outside	Return	
		Rtn -(+V

