



SMU250P Series

UL, EN, IEC 60601-1 3rd Edition Medical
250 Watt AC - DC Open Frame Power Supply

Date: 2/11/16

Rev: 021116

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The SMU250P Series open frame medical switch mode power supply has 250 Watts convection cooled output with 5 Vdc Standby in a 4.2" x 6" size, with UL/cUL, IEC, and EN 60601-1, 3rd Edition safety approval. It is offered as a U-chassis, with input and output configuration options.

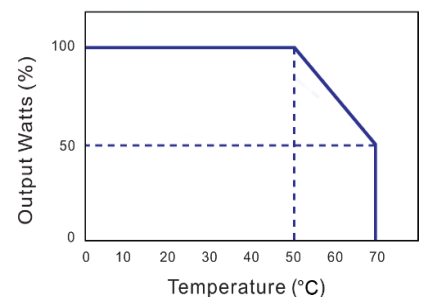


Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current (Low Line)	3.3 A Max at 100 Vac
Input Current (High Line)	1.2 A Max at 240 Vac
Power Factor Correction	0.95 - 1
Safety Ground Leakage Current	0.15 mA Max at 240 Vac, Full Load
Output Voltage & Current	See Table on Page 2
Ripple & Noise (P-P)	1% Max., Full Load at 90 Vac Input
Over-Voltage Protection	112 - 132%
Over-Current Protection	110 - 150%
Temperature Coefficient	± 0.04% / °C Max
Transient Response	50% Load Change at 100 Vac Input: 4 ms Max
Efficiency	88 - 94%
No Load Power Consumption	≤ 1.5 Watts
Line Regulation	± 1% Max at Full Load
Load Regulation	± 5% Max at 230 Vac
Start-Up Time	2 s Max
Hold-Up Time	20 ms Min
Withstanding Voltage	Primary to Secondary: 5,656 Vdc Primary to Ground: 2,121 Vdc
Insulation Resistance	50 MΩ Min
Inrush Current	45 A @ 115 Vac Max at 25°C Cold Start 90 A @ 230 Vac Max at 25°C Cold Start
Mean Time Between Failure	Full Load at 25°C Ambient: 100,000 Hours Min
Operating Temperature	See Derating Curve
Storage Temperature	-40 to 85 °C
Industry Compliance	Directive 2011/65/EU (RoHS 2)
EMI Requirements	Meets Conduction Limits of: CISPR-11 Class B and EN 55011 Class B
Safety Compliance	ANSI/AAMI ES 60601-1:2005 (UR Listed 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition), CE, CB

Features:

- Universal Input 100 - 240 Vac
- 5 Vdc Standby Output
- Internal EMI Filter
- Convection Cooled
- Over-Voltage, Over-Current, and Short Circuit Protection
- Active Power Factor Correction
- 100% Burn-In
- RoHS 2 Compliant
- 2 MOPP Protection
- Class I

Derating Curve



Derate Linearly from 100% at 50°C to 50% at 70°C



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Output Voltage and Current Table

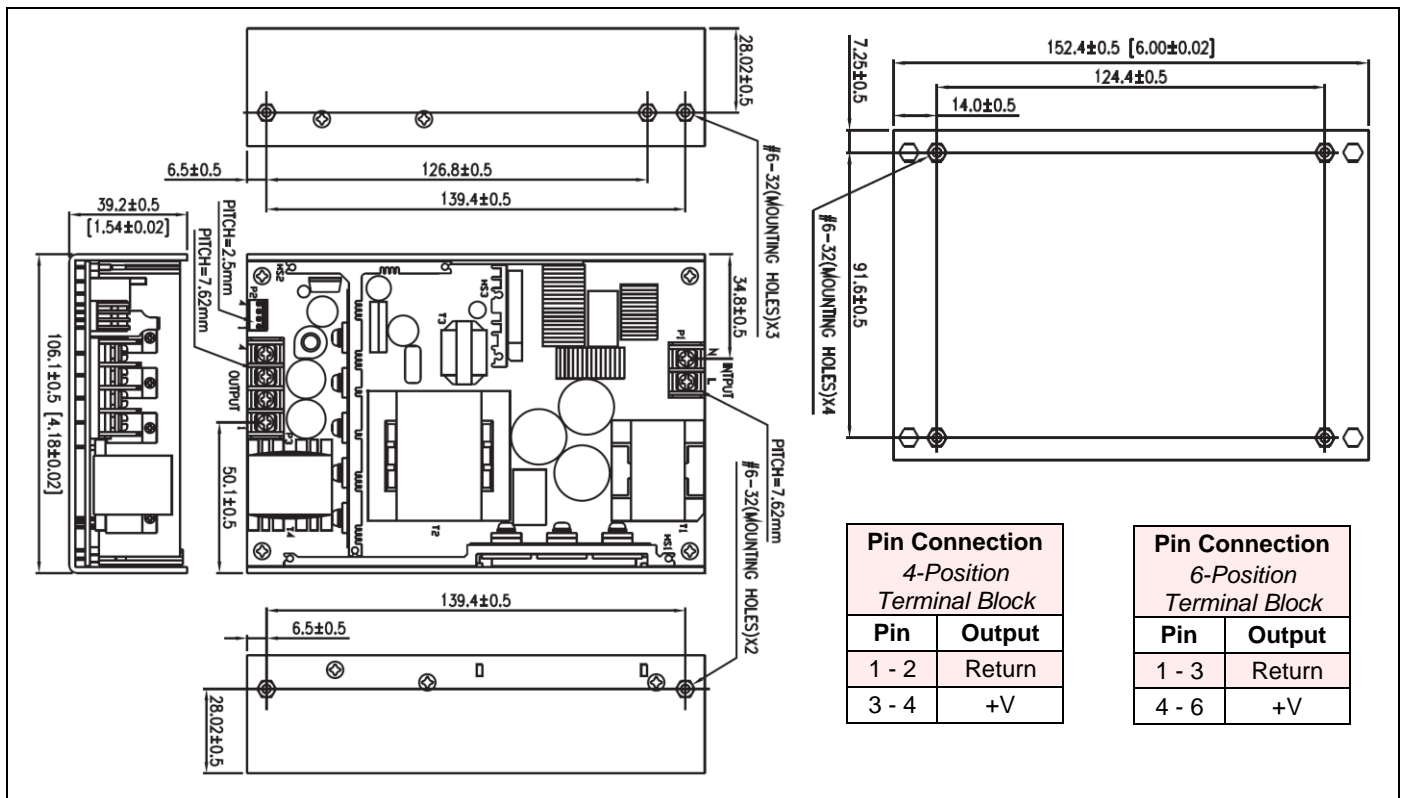
Output Voltage	Maximum Output Current	Standby Voltage	Standby Output Current	Total Regulation	Maximum Output Power
12 Vdc	20 A	5 Vdc	2 A	5%	240 W
24 Vdc	10.42 A	5 Vdc	2 A	3%	250 W
36 Vdc	6.94 A	5 Vdc	2 A	2%	250 W
48 Vdc	5.21 A	5 Vdc	2 A	2%	250 W

SMU250P1 R

Output Connector: B = Barrier Style Terminal Block
C = European Type Terminal Block

Output Voltage: See Table

Mechanical Specification (mm [in])



Pin Connection 4-Position Terminal Block	
Pin	Output
1 - 2	Return
3 - 4	+V

Pin Connection 6-Position Terminal Block	
Pin	Output
1 - 3	Return
4 - 6	+V

- Input Connector Mating:
 - Dinkle DT-2GN-B01W-02P
 - Dinkle SK750V-02P
- Output Connector Mating:
 - Dinkle DT-2GN-B01W-(04P or 06P)
 - Dinkle ESK750V-(04P OR 06P)



TECHNOLOGIES INC.
HICKSVILLE, NEW YORK

264 Duffy Avenue
Hicksville, NY 11801

Tel: (516) 433-1313
Fax: (516) 433-1457

Web: www.apxonline.com
Email: sales@apxonline.com

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