



SM32P1R Series 20 - 30 Watts

UL, EN, IEC 60601-1 3rd Edition Medical
20 Watt - 30 Watt AC - DC Power Supply

Date: 2/11/16

Rev: 021116

Page: 1 of 2

The SM32P1R Series medical switch mode desktop provides 20 - 30 Watts of output power in a slim-case design, and carries UL/ CUL, IEC and EN60601-1, 3rd Edition safety approvals, as well as PSE approval for Japan.

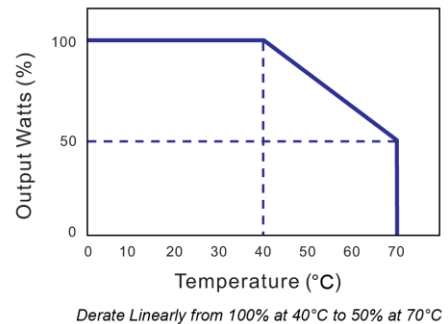


Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current (Low Line)	0.6 A Max at 100 Vac
Input Current (High Line)	0.4 A Max at 240 Vac
Safety Ground Leakage Current	0.3 mA Max at 240 Vac, Full Load
Output Voltage & Current	See Table on Page 2
Ripple & Noise (P-P)	1% Max., Full Load at 90 Vac Input
Over-Voltage Protection	112 – 132% Max
Over-Current Protection	110 – 150% Max
Temperature Coefficient	± 0.04% / °C Max
Transient Response	50% Load Change at 100 Vac Input: 4 ms Max
Efficiency	73.5 - 85%
No Load Power Consumption	≤ 0.3 Watts
Line Regulation	± 1% Max at Full Load
Load Regulation	± 5% Max at 230 Vac
Start-Up Time	0.3 - 2 s
Hold-Up Time	12 ms Min
Withstanding Voltage	Primary to Secondary: 6,284 Vdc
Insulation Resistance	50 MΩ Min
Inrush Current	28A @ 115VAC Max at 25°C Cold Start 56A @ 230VAC 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), Energy Efficiency Level V
EMI Requirements	Meets Conduction Limits of: CISPR-11 Class B, FCC Part 18 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, FCC, PSE

Features:

- Universal Input 100 - 240 Vac
- IEC 320 C18 and C8 Input
- Over-Voltage Protection
- Over-Current Protection
- 100% Burn-In
- Energy Efficiency Level V
- RoHS 2 Compliant
- 2 MOPP Protection
- Class II

Derating Curve





SM32P1R Series 20 - 30 Watts

UL, EN, IEC 60601-1 3rd Edition Medical
20 Watt - 30 Watt AC - DC Power Supply

Date: 2/11/16

Rev: 021116

Page: 2 of 2

Output Voltage and Current Table

Output Voltage Range *	Output Current <i>Limited to Output Power †</i>	Total Regulation	Maximum Output Power
5 Vdc	4 A	5%	20 W
6 - 8 Vdc	3.83 - 2.87 A	5%	23 W
9 - 11 Vdc	3.00 - 2.45 A	5%	27 W
12 - 13 Vdc	2.50 - 2.30 A	5%	30 W
14 - 16 Vdc	2.14 - 1.88 A	5%	30 W
17 - 21 Vdc	1.76 - 1.43 A	5%	30 W
22 - 27 Vdc	1.36 - 1.11 A	5%	30 W
28 - 33 Vdc	1.07 - 0.91 A	3%	30 W
34 - 40 Vdc	0.88 - 0.75 A	3%	30 W
41 - 48 Vdc	0.73 - 0.63 A	3%	30 W

* Output Voltages between ranges are also available.

† To find Output Current:

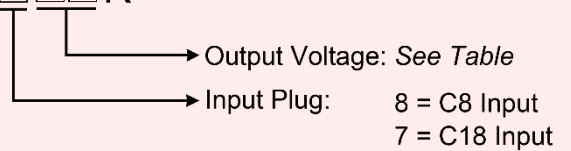
Output Current = Max Power ÷ Output Voltage

Example: Output Current for 5 VDC Output

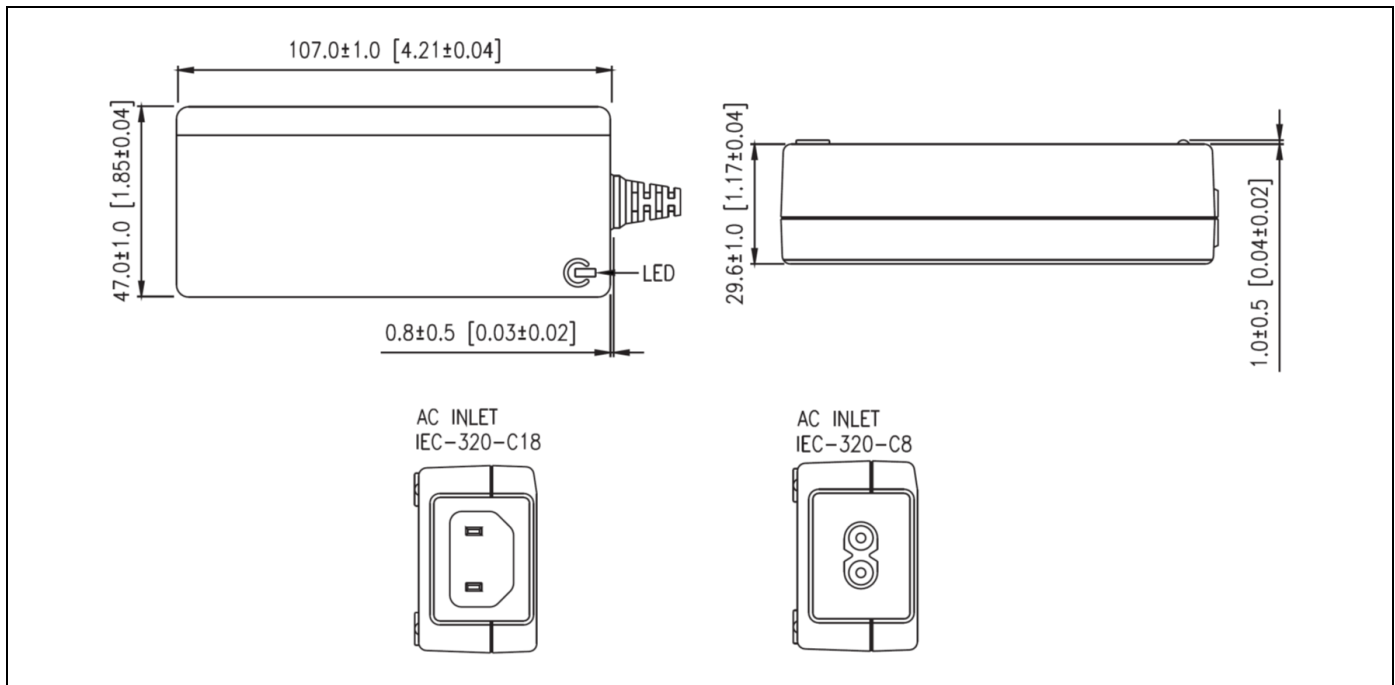
Output Current = 20 W ÷ 5 V

Output Current = 4 A

SM32P1R □ □ □ R



Mechanical Specification (mm, [in])



Note: Output connector to be specified.

The cable length, wire gauge, and output connector will be dependent on the Energy Efficiency level requirements.



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

© 1978 APX Technologies, Inc.
Specification subject to change without notice