



SM101P Series 70 - 100 Watts

UL, EN, IEC 60601-1 3rd Edition Medical
70 Watt - 100 Watt AC - DC Power Supply

Date: 2/11/16

Rev: 021116

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The SM101P Series medical switch mode desktop features a choice of single, dual, and triple-output options ranging from 70 Watts to 100 Watts power, with UL, cUL, IEC and EN60601-1, 3rd Edition safety approvals.

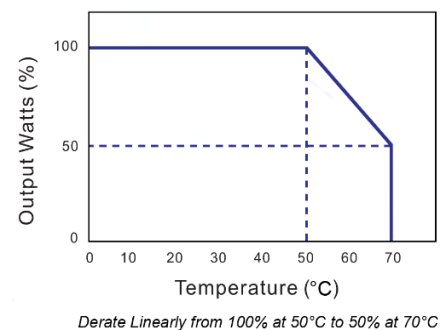


| | |
|-------------------------------|---|
| Input Voltage | 90 to 260 Vac |
| Input Frequency | 47 to 63 Hz |
| Input Current (Low Line) | 1.25 A Max at 100 Vac |
| Input Current (High Line) | 0.5 A Max at 240 Vac |
| Power Factor Correction | 0.95 – 1 |
| Safety Ground Leakage Current | 0.1 mA Max 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 | 75 – 88% |
| No Load Power Consumption | ≤ 3 Watts Single Output ≤ 4 Watts Dual/Triple Output |
| Line Regulation | ± 1% Max at Full Load |
| Load Regulation | ± 7% Max at 230 Vac |
| Start-Up Time | 0.3 – 2 s |
| Hold-Up Time | 16 ms Min |
| Withstanding Voltage | Primary to Secondary: 6932 Vdc Min. Primary to Ground: 2121 Vdc Min. |
| Insulation Resistance | 50 MΩ Min |
| Inrush Current | 50 A @ 115 Vac Max at 25°C Cold Start 100 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, 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 C14 Input Only
- Optional On/Off Switch
- Over-Voltage Protection
- Over-Current Protection
- 100% Burn-In
- RoHS 2 Compliant
- 2 MOPP Protection
- Class I

Derating Curve





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Output Voltage and Current Table

Single Output

| Output Voltage Range * | Output Current <i>Limited to Output Power †</i> | Total Regulation | Maximum Output Power |
|------------------------|--|------------------|----------------------|
| 5 Vdc | 14.00 A | 5% | 70 W |
| 6 - 8 Vdc | 13.33 – 10.00 A | 5% | 80 W |
| 9 - 11 Vdc | 10.00 – 8.20 A | 4% | 90 W |
| 11 - 13 Vdc | 9.09 – 7.70 A | 3% | 100 W |
| 14 - 16 Vdc | 7.14 – 6.30 A | 3% | 100 W |
| 17 - 21 Vdc | 5.88 – 4.80 A | 3% | 100 W |
| 22 - 27 Vdc | 4.54 – 3.70 A | 2% | 100 W |
| 28 - 33 Vdc | 3.57 – 3.00 A | 2% | 100 W |
| 34 - 40 Vdc | 2.94 – 2.50 A | 2% | 100 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 = 70 W ÷ 5 V

Output Current = 14 A

SM101P9□□R

→ Output Voltage: See Table

Dual Output

| Model Number | Output # 1* | | | Output # 2* | | | Maximum Output Power |
|--------------|-------------|-----------|------------|-------------|-----------|------------|----------------------|
| | Voltage | Current | Regulation | Voltage | Current | Regulation | |
| SM101P250R | +5 Vdc | 1 – 10 A | 5% | +12 Vdc | 0.3 – 3 A | 5% | 80 W |
| SM101P253R | +5 Vdc | 1 – 10 A | 5% | +15 Vdc | 0.3 – 3 A | 6% | 80 W |
| SM101P254R | +5 Vdc | 1 – 10 A | 5% | +24 Vdc | 0.2 – 2 A | 7% | 80 W |
| SM101P256R | +12 Vdc | 0.7 – 7 A | 5% | -12 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P257R | +15 Vdc | 0.6 - 6 A | 5% | -15 Vdc | 0.1 – 1 A | 5% | 80W |
| SM101P259R | +3.3 Vdc | 1 – 10 A | 7% | +5 Vdc | 0.5 – 5 A | 5% | 55 W |
| SM101P260R | 3.3 Vdc | 1 – 10 A | 7% | +12 Vdc | 0.3 – 3 A | 5% | 69 W |
| SM101P262R | +5 Vdc | 1 – 10 A | 5% | -24 Vdc | 0 – 1 A | 5% | 74 W |
| SM101P265R | +24 Vdc | 0.3 – 3 A | 5% | -24 Vdc | 0 – 1 A | 5% | 80 W |

*Total Output (Output 1 + Output 2) not to exceed Max Power



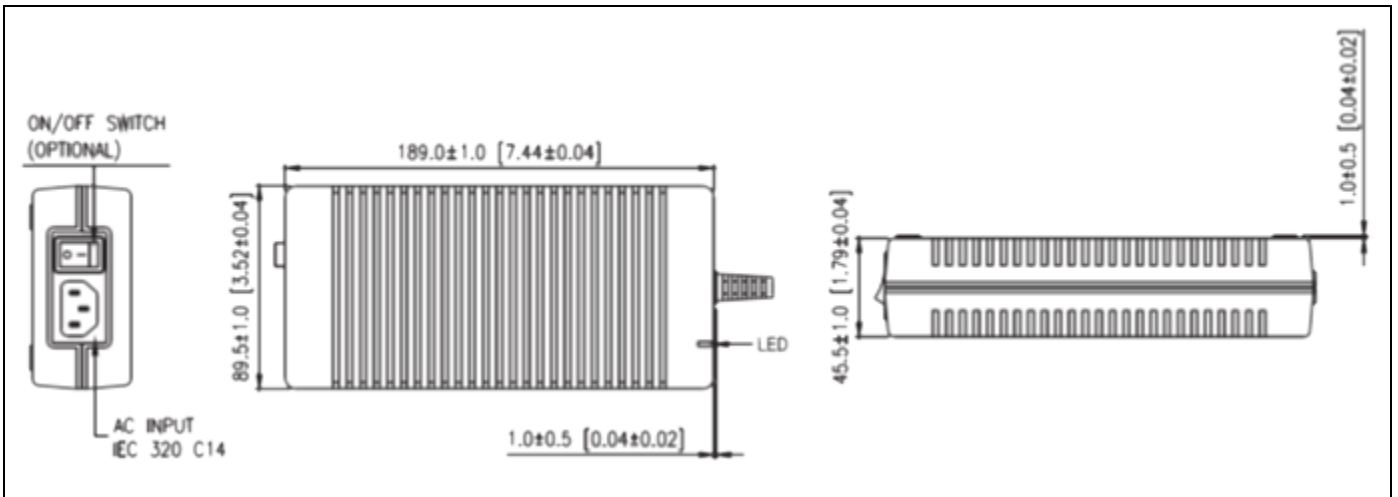
Output Voltage and Current Table *Continued*

Triple Output

| Model Number | Output # 1* | | | Output # 2* | | | Output # 3* | | | Maximum Output Power |
|--------------|-------------|----------|------------|-------------|-----------|------------|-------------|---------|------------|----------------------|
| | Voltage | Current | Regulation | Voltage | Current | Regulation | Voltage | Current | Regulation | |
| SM101P370R | +5 Vdc | 1 – 10 A | 5% | +12 Vdc | 0.3 – 3 A | 5% | -12 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P374R | +5 Vdc | 1 – 10 A | 5% | +15 Vdc | 0.3 – 3 A | 6% | -15 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P376R | +5 Vdc | 1 – 10 A | 5% | +24 Vdc | 0.3 – 3 A | 5% | -24 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P377R | +5 Vdc | 1 – 10 A | 5% | +12 Vdc | 0.3 – 3 A | 5% | -5 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P379R | +5 Vdc | 1 – 10 A | 5% | +24 Vdc | 0.3 – 3 A | 5% | -12 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P380R | +3.3 Vdc | 1 – 10 A | 7% | +12 Vdc | 0.3 – 3 A | 5% | -5 Vdc | 0 – 1 A | 5% | 74 W |
| SM101P382R | +3.3 Vdc | 1 – 10 A | 7% | +12 Vdc | 0.3 – 3 A | 5% | -12 Vdc | 0 – 1 A | 5% | 74 W |
| SM101P383R | +3.3 Vdc | 1 – 10 A | 7% | +12 Vdc | 0.3 – 3 A | 5% | +12 Vdc | 0 – 1 A | 5% | 74 W |
| SM101P384R | +5 Vdc | 1 – 10 A | 5% | +12 Vdc | 0.3 – 3 A | 5% | +5 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P385R | +5 Vdc | 1 – 10 A | 5% | +12 Vdc | 0.3 – 3 A | 5% | +12 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P386R | +5 Vdc | 1 – 10 A | 5% | +15 Vdc | 0.3 – 3 A | 6% | +15 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P387R | +5 Vdc | 1 – 10 A | 5% | +24 Vdc | 0.3 – 3 A | 5% | +24 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P388R | +5 Vdc | 1 – 10 A | 5% | +24 Vdc | 0.3 – 3 A | 5% | +12 Vdc | 0 – 1 A | 5% | 80 W |
| SM101P389R | +3.3 Vdc | 1 – 10 A | 7% | +12 Vdc | 0.3 – 3 A | 5% | +5 Vdc | 0 – 1 A | 5% | 74 W |
| SM101P392R | +3.3 Vdc | 1 – 10 A | 7% | +5 Vdc | 0.3 – 3 A | 5% | +12 Vdc | 0 – 1 A | 5% | 60 W |
| SM101P393R | +3.3 Vdc | 1 – 10 A | 7% | +5 Vdc | 0.3 – 3 A | 5% | -12 Vdc | 0 – 1 A | 5% | 60 W |

*Total Output (Output 1 + Output 2 + Output 3) not to exceed Max Power

Mechanical Specification (mm, [in])



Note: Output connector to be specified.
Standard Termination is a 6 ft. (AWG#18) cable w/ 5-Pin Power Din plug