



SM160Q Series

160 Watts

Date: 8/5/13

UL/IEC/EN 60601-1 3rd Edition Medical Power Supply
RoHS 2 Compliant, Energy Efficiency Level V

Rev: 070213

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Features:

- Universal Input 100 – 240 VAC
- 12, 19, 24, 48 VDC Output
- Over-Current Protection
- Over-Voltage Protection
- Short Circuit Protection
- 100% Burn-In
- RoHS 2 Compliant
- Energy Efficiency Level: V



Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63 Hz
Input Current	1.2 A Max @ 115 VAC 0.9 A Max @ 230 VAC
Safety Ground Leakage Current	0.5 mA Max @ Full Load

Output

Output Voltage & Current	See Chart
Ripple & Noise (P-P)	1%~2% Max, Full Load
Over-Voltage Protection	Unit is Protected to Over-Voltage Conditions
Over-Current Protection	Output Protected to Short Circuit Conditions
Transient Response	Full Load to Half Load: 0.5 ms Max

Environmental

Operating Temperature	0°C to 70°C
Derating	Derated from 100% at +40°C to 50% at +70°C
Storage Temperature	-20°C to 80°C
Relative Humidity	10% to 90% Non-Condensing

Electrical

Efficiency	Meets Energy Efficiency Level V Criteria
No Load Power Consumption	≤0.5 Watts
Hold-Up Time	10 ms @ Full Load
Load Regulation	± 5% Typical
Withstanding Voltage	4,000 VAC from Primary to Secondary
Mean Time Between Failure (MTBF)	100,000 Hours Min., Full Load at 25°C Ambient

Safety

EMI Requirements	Meets Conduction Limits of: (A) FCC Part 15 Class B (B) EN 55022 Class B
Safety Standards	Meets or Exceeds: (A) UR Listed 3rd Edition (ANSI/AAMI ES 60601-1:2005) (B) TUV (T-mark) 3rd Edition (EN 60601-1:2006) (C) CE (D) CB (E) FCC



Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SM160QY12R	12 VDC	12.5 A	5%	150W
SM160QY19R	19 VDC	8.4 A	5%	160W
SM160QY24R	24 VDC	6.6 A	5%	160W
SM160QY48R	48 VDC	3.3 A	5%	160W

** To Determine Part Number:

- Replace "Y" with Required Input Socket Style Designation: C6 = "6", C14 = "9"

Example: SM160Q924R indicates a 24VDC Unit with C14 Input Socket.

Note: Output connector to be specified.

The cable length, wire gauge, and output connector will be dependant on CEC requirements for each current level.

