



SMF15Q – SMF24Q Series

15 – 24 Watt AC-DC Open Frame Medical Power Supply
IEC 60101-1-2 4th Ed. EMC, DoE Level VI, RoHS 2

Date: 10/10/18

Rev: 070918

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The SMF15Q – SMF24Q Series switch mode power supply offers 15 Watts to 24 Watts output power, with an output voltage range of 3.3 Vdc – 48 Vdc. Case style is an open frame with PCB pins, with ES/EN/IEC 60601-1 3.1 Edition Medical, IEC 60601-1-2 4th Edition EMC, UL/EN 60950-1 2nd Edition safety approvals, and DoE Level 6 efficiency.



Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current	0.55 – 0.30 A
Touch Current	< 100 μ A
Output Voltage & Current	See Table on Page 2
Ripple & Noise (P-P) ¹	2% Max.
Over-Voltage Protection	Unit is protected from over-voltage conditions
Over-Current Protection	Unit is protected from over-current conditions
Transient Response	50% Load Change: 0.5 ms Typ.
Efficiency	DoE Level VI
No Load Power Consumption	< 0.075 Watts
Load Regulation	\pm 5% Typ.
Hold-Up Time	10 ms Min.
Withstanding Voltage	Primary to Secondary: 4,000 Vac Min.
Mean Time Between Failure	Full Load at 25°C Ambient: 300,000 Hours Min. (Telcordia)
Operating Temperature	0 to 50°C
Storage Temperature	-20 to 80°C
Industry Compliance	DoE VI, RoHS 2 (2011/65/EU)
Weight	58 g (Ref.)
EMC Requirements	IEC 60601-1-2:2014 4 th Ed., EN 55024, EN 61000-3-2, -3-3
EMI Requirements	Meets Conduction and Radiation Limits of: CISPR-11 Class B, EN 55011 Class B, and FCC Part 15 Class B
Safety Compliance	UR/cUR (ES 60601-1:3.1 Ed.), TUV T- Mark (EN 60601-1:3.1 Ed.), CE, CB (UL/EN/IEC 60950-1:2 nd Ed.), FCC

Features:

- Universal Input 100 - 240 Vac
- 2 x MOPP Protection
- < 100 μ A Touch Current
- Over-Voltage, Over-Current, and Short Circuit Protection
- 100% Burn-In
- DoE Level VI
- Meets UL/EN/IEC 60950-1 2nd Ed.
- Meets IEC 60601-1-2: 2014 4th Edition EMC Requirements

Note:

1. Ripple & Noise are measured with a 0.1 μ F multilayer capacitor & 0.10 μ F low ESR electrolytic capacitor in parallel and a 20 MHz bandwidth-limited scope.



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Output Voltage and Current Table

Model Number	Output Voltage	Output Current	Output Power
SMF15Q103PR	3.3 Vdc	4.5 A	14.85 W
SMF22Q105PR	5.0 Vdc	4.4 A	22.00 W
SMF24Q112PR	12.0 Vdc	2.0 A	24.00 W
SMF24Q115PR	15.0 Vdc	1.6 A	24.00 W
SMF24Q124PR	24.0 Vdc	1.0 A	24.00 W
SMF24Q148PR	48.0 Vdc	0.5 A	24.00 W

SMF Q1 PR

Output Voltage: See Table

Output Power: See Table

Mechanical Specification (mm)

