



# SMF08Q – SMF12Q Series

8 - 12 Watt AC-DC Open Frame Medical Power Supply  
IEC 60101-1-2 4<sup>th</sup> Ed. EMC, DoE Level VI, RoHS 2

Date: 10/9/18

Rev: 070918

Page: 1 of 2

The SMF08Q – SMF12Q Series switch mode power supply offers 8 Watts to 12 Watts output power, with an output voltage range of 3.3 Vdc – 24 Vdc. Case style is an open frame with PCB pins, with ES/EN/IEC 60601-1 3.1 Edition Medical, IEC 60601-1-2 4<sup>th</sup> Edition EMC, UL/EN 60950-1 2<sup>nd</sup> Edition safety approvals, and DoE Level 6 efficiency.



Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current	0.29 – 0.17 A
Touch Current	< 100 $\mu$ A
Output Voltage & Current	See Table on Page 2
Ripple & Noise (P-P) <sup>1</sup>	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	Directive 2011/65/EU (RoHS 2), DoE VI
Weight	42 g (Ref.)
EMC Requirements	IEC 60601-1-2: 2014 4 <sup>th</sup> 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 <sup>nd</sup> Ed.1), FCC

## Features:

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

### Note:

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



# SMF08Q – SMF12Q Series

8 - 12 Watt AC-DC Open Frame Medical Power Supply  
IEC 60101-1-2 4<sup>th</sup> Ed. EMC, DoE Level VI, RoHS 2

Date: 10/9/18

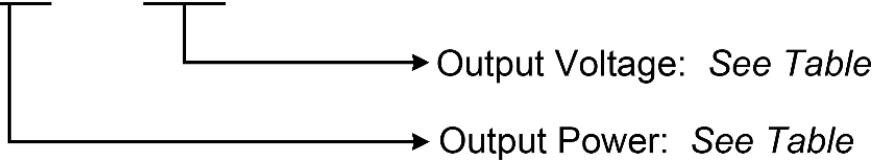
Rev: 070918

Page: 2 of 2

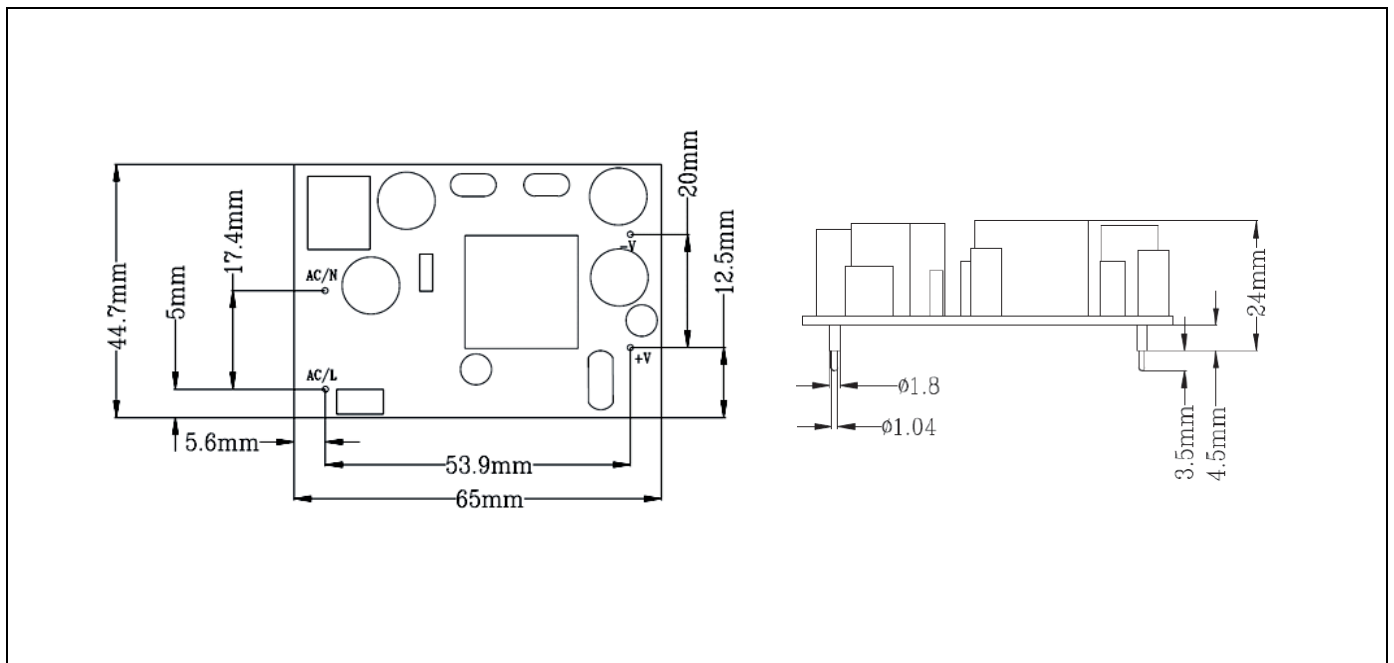
## Output Voltage and Current Table

Model Number	Output Voltage	Output Current	Output Power
SMF08Q103PR	3.3 Vdc	2.5 A	8.25 W
SMF10Q105PR	5.0 Vdc	2.0 A	10.00 W
SMF12Q112PR	12.0 Vdc	1.0 A	12.00 W
SMF12Q115PR	15.0 Vdc	0.8 A	12.00 W
SMF12Q124PR	24.0 Vdc	0.5 A	12.00 W

SMF   Q1   PR



## Mechanical Specification (mm)



TECHNOLOGIES INC.  
HICKSVILLE, NEW YORK

264 Duffy Avenue  
Hicksville, NY 11801

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

Web: [www.apxonline.com](http://www.apxonline.com)  
Email: [sales@apxonline.com](mailto:sales@apxonline.com)

Specification subject to  
change without notice