



# SP15Q - SP20Q Series

15 - 20 Watt AC - DC Desktop Power Supply  
UL/EN/IEC 62368-1 2<sup>nd</sup> Ed., DoE VI, CoC v5 Tier 2

Date: 9/27/18

Rev: 072318

Page: 1 of 3

The SP15Q - SP20Q Series switch mode power supply offers 15 Watts to 20 Watts output power, with an output voltage range of 5 Vdc - 24 Vdc. Case style is a desktop enclosure with choice of IEC-320 C6, C8, C14 input socket, with UL/cUL, EN and IEC 62368-1 and 60950-1 2<sup>nd</sup> Edition safety approvals, DoE Level 6, and CoC v5 Tier 2.



|                                   |   |
|-----------------------------------|---|
| Input Voltage                     | 90 to 264 Vac   |
| Input Frequency                   | 47 to 63 Hz   |
| Input Current                     | 0.48 A Max.   |
| Leakage Current                   | 0.25 mA Max.  |
| 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 Time           | 50% Load Change: 0.5 ms   |
| Efficiency                        | Meets DoE Level VI and CoC v5 Tier 2 Criteria   |
| No Load Power Consumption         | Meets DoE Level VI and CoC v5 Tier 2 Criteria   |
| Load Regulation                   | ± 5% Typ.   |
| Hold-Up Time                      | 10 ms Min.  |
| Withstanding Voltage              | Primary to Secondary: 3000 Vac  |
| Mean Time Between Failure         | Full Load at 25°C Ambient: 300,000 Hours Min (Telcordia)  |
| Operating Temperature             | 0 to 40°C   |
| Storage Temperature               | -20 to 80°C   |
| Weight                            | 144 g (Ref.)  |
| Industry Compliance               | RoHS 2, DoE Level VI, CoC v5 Tier 2   |
| EMC Requirements                  | EN 55024, EN 61000-3-2, -3-3  |
| EMI Requirements                  | Meets Conduction and Radiation Limits of:<br>FCC Part 15 Class B, CISPR-32 Class B, and EN 55032 Class B  |
| Safety Compliance                 | UL/cUL (UL/CSA 62368-1:2 <sup>nd</sup> Ed., 60950-1:2 <sup>nd</sup> Ed.),<br>GS (EN 60950-1:2 <sup>nd</sup> Ed.) CE, CB (EN/IEC 62368-1:2 <sup>nd</sup> Ed.),<br>PSE, BSMI, CCC, RCM, LPS |

## Features:

- Universal Input 100 - 240 Vac
- IEC 320 C14, C8, and C6 Input
- Over-Voltage Protection
- Over-Current Protection
- Short Circuit Protection
- 100% Burn-In
- RoHS 2 Compliant
- DoE Level VI
- CoC v5 Tier 2

### Note:

1. Ripple & Noise are measured with a 0.1 µF multilayer capacitor & 47 µF low ESR electrolytic capacitor in parallel and a 20 MHz bandwidth-limited scope.



# SP15Q - SP20Q Series

15 - 20 Watt AC - DC Desktop Power Supply  
UL/EN/IEC 62368-1 2<sup>nd</sup> Ed., DoE VI, CoC v5 Tier 2

Date: 9/27/18

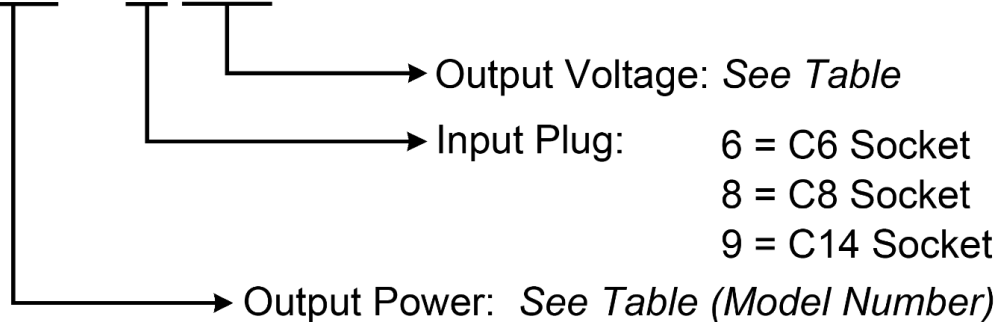
Rev: 072318

Page: 2 of 3

## Output Voltage and Current Table

| Model Number | Output Voltage | Output Current | Output Power |
|--------------|----------------|----------------|--------------|
| SP15Q_05R    | 5 Vdc          | 3.0 A          | 15.00 W      |
| SP15Q_06R    | 5.9 Vdc        | 2.5 A          | 14.75 W      |
| SP18Q_06R    | 5.9 Vdc        | 3.0 A          | 17.70 W      |
| SP18Q_07R    | 7 Vdc          | 2.5 A          | 17.50 W      |
| SP19Q_07R    | 7.5 Vdc        | 2.5 A          | 18.75 W      |
| SP20Q_09R    | 9 Vdc          | 2.2 A          | 19.80 W      |
| SP19Q_10R    | 10 Vdc         | 1.9 A          | 19.00 W      |
| SP18Q_11R    | 11 Vdc         | 1.6 A          | 17.60 W      |
| SP19Q_12R    | 12 Vdc         | 1.6 A          | 19.20 W      |
| SP20Q_15R    | 15 Vdc         | 1.3 A          | 19.50 W      |
| SP19Q_16R    | 16 Vdc         | 1.2 A          | 19.20 W      |
| SP20Q_18R    | 18 Vdc         | 1.1 A          | 19.80 W      |
| SP19Q_24R    | 24 Vdc         | 0.8 A          | 19.20 W      |

SP  Q  R



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



# SP15Q - SP20Q Series

15 - 20 Watt AC - DC Desktop Power Supply  
 UL/EN/IEC 62368-1 2<sup>nd</sup> Ed., DoE VI, CoC v5 Tier 2

Date: 9/27/18

Rev: 072318

Page: 3 of 3

## Mechanical Specification (mm)

| 2-Pin Case (C8 Input)  |                  | 3-Pin Case (C6 & C14 Input) |  |
|--|------------------|-----------------------------|--|
|  |                  |                             |  |
|  |                  |                             |  |
| SP__Q9: C14 Input  | SP__Q8: C8 Input | SP__Q6: C6 Input            |  |
|  |                  |                             |  |
| <p>Note: Output connector to be specified by customer.<br/>           APX will be happy to recommend the appropriate connector for your application needs.<br/>           The cable length and wire gauge will be dependent on the Energy Efficiency level requirements.</p> |                  |                             |  |