



SP40Q – SP48Q Series

40 - 48 Watt AC - DC Desktop Power Supply
UL/EN/IEC 62368-1 2nd Ed., DoE VI, CoC v5 Tier 2

Date: 9/27/18

Rev: 091418

Page: 1 of 3

The SP40Q – SP48Q Series switch mode power supply offers 40 to 48 Watts output power, with an output voltage range of 12 - 48 Vdc. Case style is a desktop enclosure with choice of IEC-320 C6, C8, or C14 input socket, with UL/EN/IEC 62368-1 2nd Edition and 60950-1 2nd Edition safety approvals, and DoE Level 6 and CoC v5 Tier 2 Efficiency.



Input Voltage	90 to 264 Vac
Input Frequency	47 to 63 Hz
Input Current	40 Watt Models: 1.0 A Max. 48 Watt Model: 1.2 A Max.
Leakage Current	C14 and C6 Models: 3.5 mA Max. C8 Model: 0.25 mA Max.
Output Voltage & Current	See Table on Page 2
Ripple & Noise ¹ (P-P)	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 Criteria and CoC v5 Tier 2 Criteria
No Load Power Consumption	Meets DoE Level VI Criteria 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	200 g (Ref.)
Industry Compliance	RoHS 2, DoE VI, CoC v5 Tier 2
EMC Requirements	EN 55024, EN 61000-3-2, -3-3
EMI Requirements	Meets Conduction and Radiation Limits of: FCC Part 15 Class B, CISPR-32 Class B, and EN 55032 Class B
Safety Compliance	UL/cUL (UL/CSA 62368-1:2 nd Ed., 60950-1:2 nd Ed.), GS (EN 60950-1:2 nd Ed.), CB (EN/IEC 62368-1:2 nd Ed.), CE, CCC, PSE, RCM, BSMI, 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
- Efficiency: DoE 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.



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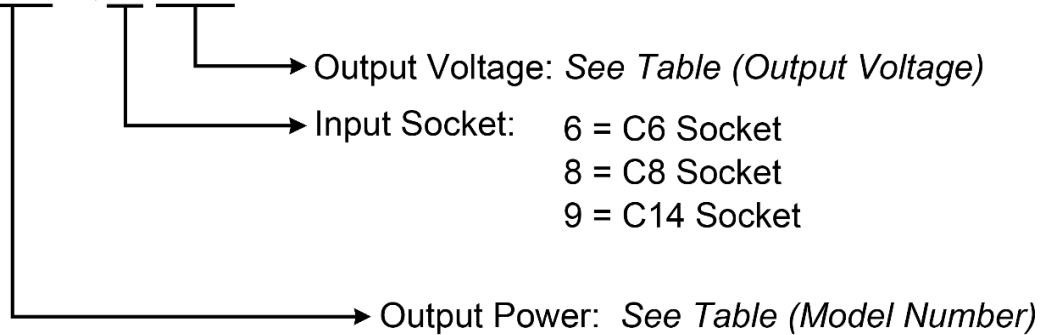
Page: 2 of 3

Output Voltage and Current Table

Model Number	Output Voltage	Output Current	Output Power
SP40Q_12R	12 Vdc	3.30 A	40 W
SP40Q_15R	15 Vdc	2.67 A	40 W
SP40Q_19R	19 Vdc	2.10 A	40 W
SP40Q_20R	20 Vdc	2.00 A	40 W
SP40Q_24R	24 Vdc	1.67 A	40 W
SP48Q_48R*	48 Vdc	1.00 A	48 W

*Available with an IEC320 C8 Input Only

SP Q R





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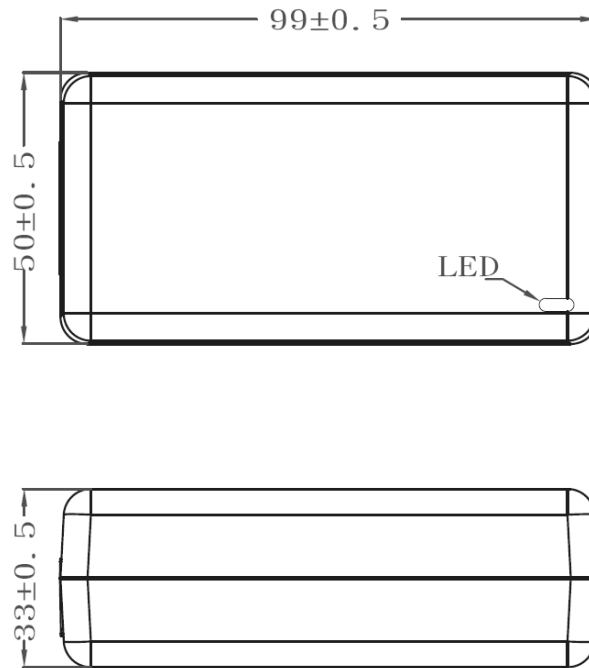
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Page: 3 of 3

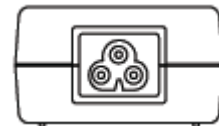
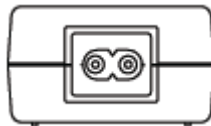
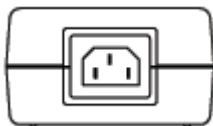
Mechanical Specification (mm)



SP__Q9: C14 Input

SP__Q8: C8 Input

SP__Q6: C6 Input



Note: Output connector to be specified by customer.
APX will be happy to recommend the appropriate connector for your application needs.
The cable length and wire gauge will be dependent on the Energy Efficiency level requirements.