



Features:

- Universal Input 100 – 240 VAC
- 5 VDC to 50 VDC
- Over-Current Protection
- Over-Voltage Protection
- 100% Burn-In
- LED Indication
- RoHS Compliant
- CEC Efficiency Level: IV & V



Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Input Current	0.8A Max at 115VAC 0.5A Max at 230VAC
Safety Ground Leakage Current	0.75mA Max. @ 240VAC, Full Load

Output

Output Voltage & Current	See Chart
Ripple & Noise (P-P)	1% Max, Full Load @ 90VAC Input
Over-Voltage Protection	Set at 112 - 132% of Nominal Output Voltage
Over-Current Protection	Set at 110 - 150% of Nominal Output Current
Temperature Coefficient	± 0.04% / °C Max.
Transient Response	Full Load to Half Load @ 100VAC Input: 4mS Max.

Environmental

Operating Temperature	0°C to 70°C
Derating	Derated from 100% at +40°C to 50% at +70°C
Storage Temperature	-40°C to 85°C
Relative Humidity	5% to 95% Non-Condensing

Electrical

Efficiency	Meets CEC Level IV & V
No Load Power Consumption	≤0.3 Watts (9V - 50V Output) ≤0.5 Watts (5V - 8V Output)
Hold-Up Time	12mS Min.
Line Regulation	±1% Max. at Full Load
Load Regulation	±7% Max. at 230VAC
Inrush Current	15A @ 115VAC Max. 30A @ 230VAC Max. at 25°C Cold Start
Withstanding Voltage	4242 VDC from Input to Output, 2121 VDC from Input to Ground
Insulation Resistance	50 MΩ Min. from Output to Ground
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) CISPR-22 Class B
Safety Standards	Meets or Exceeds: (A) UL/ c-UL (B) TUV/GS (C) CB (D) CE (E) PSE (12V - 16V Output) (F) KC (14V - 16V Output) (G) CEC Level IV (5V - 8V Output) (E) CEC Level V (9V - 50V Output)



SP31P Series

Desk-Top, Switchmode Power Supply
RoHS Compliant, CEC Efficiency Level IV & V

Date: 1/20/10

Rev: 070109

Page: 2 of 2

Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SP31P9XXR	5 - 6 VDC	5.00 - 4.16 A	5%	25W
SP31P9XXR	7 - 8 VDC	3.57 - 3.12 A	5%	25W
SP31P9XXR	9 - 11 VDC	3.33 - 2.72 A	5%	30W
SP31P9XXR	12 - 13 VDC	2.50 - 2.30 A	5%	30W
SP31P9XXR	14 - 16 VDC	2.14 - 1.87 A	5%	30W
SP31P9XXR	17 - 21 VDC	1.76 - 1.42 A	5%	30W
SP31P9XXR	22 - 27 VDC	1.36 - 1.11 A	3%	30W
SP31P9XXR	28 - 33 VDC	1.07 - 0.90 A	3%	30W
SP31P9XXR	34 - 40 VDC	0.88 - 0.75 A	3%	30W
SP31P9XXR	41 - 50 VDC	0.73 - 0.60 A	3%	30W

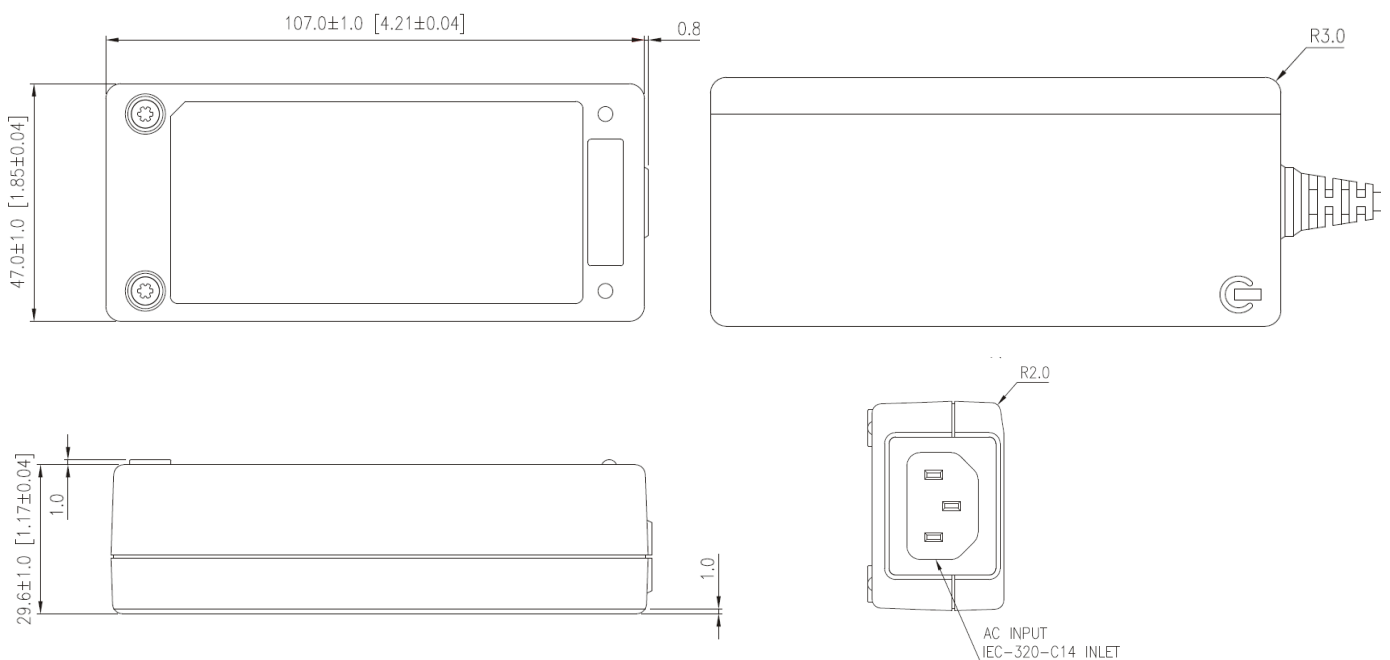
** To Determine Part Number:

- Replace "XX" with Required Output Voltage (5VDC = "05", 12VDC = "12", 48VDC = "48", etc.)

Example: SP31P924R indicates a 24VDC Unit.

Note: Output Connector to be specified. Standard Connector: 2.5x5.5x11mm female barrel coaxial plug, center-hole positive (+).

Cable Length for Total Regulation: For 5V - 13V Output: 4 Ft., 16AWG
 For 14V - 27V Output: 4 Ft., 18AWG
 For 28V - 50V Output: 6 Ft., 18AWG



TECHNOLOGIES INC.
HICKSVILLE, NEW YORK

• 264 Duffy Avenue
• Hicksville, NY 11801

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

• Web: www.apxonline.com
• Email: sales@apxonline.com

• © Copyright 1978
• APX Technologies, Inc.