SM30P Series

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

Features:

- Universal Input 100 – 240 VAC
- IEC320-C14 Input Socket
- Single, Dual & Triple Outputs
- Power Factor Correction
- Input Surge Current Protection
- Over-Current Protection, Over-Voltage Protection
- 100% Burn-In
- RoHS Compliant
- CEC Efficiency Level: V

Input

Input Voltage	90 to 264 VAC
Input Frequency	47 to 63Hz
Input Current	0.9A Max. at 115VAC 0.34A Max. at 230VAC
Safety Ground Leakage Current	0.1mA 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 V Criteria
No Load Power Consumption	≤0.3 Watts
Hold-Up Time	16mS Min.
Line Regulation	±1% Max. at Full Load
Load Regulation	±10% Max. at 230VAC
Inrush Current	15A @ 115VAC Max. 38A @ 230VAC Max. at 25°C Cold Start
Withstanding Voltage	5656 VDC from Primary to Secondary, 2828 VDC from Primary 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) CISPR-11 Class B (B) FCC Part 18 Class B
Safety Standards	Meets or Exceeds: (A) UR Listed (UL 60601-1) (B) TUV/T-Mark (EN 60601-1) (C) CE (D) CB (E) PSE (F) CEC Level V

Single Output Voltage and Current Chart

Model Number**	Output Voltage	Output Current	Total Regulation	Maximum Output Power
SM30P9XXR	3 - 5 VDC	6.66 - 4.00 A	5%	20W
SM30P9XXR	5 - 6 VDC	5.00 - 4.16 A	5%	25W
SM30P9XXR	7 - 8 VDC	3.57 - 3.12 A	5%	25W
SM30P9XXR	8 - 11 VDC	3.75 - 2.72 A	4%	30W
SM30P9XXR	12 - 13 VDC	2.50 - 2.30 A	3%	30W
SM30P9XXR	14 - 16 VDC	2.14 - 1.87 A	3%	30W
SM30P9XXR	17 - 21 VDC	1.76 - 1.42 A	3%	30W
SM30P9XXR	22 - 27 VDC	1.36 - 1.11 A	2%	30W
SM30P9XXR	28 - 33 VDC	1.07 - 0.91 A	2%	30W
SM30P9XXR	34 - 40 VDC	0.88 - 0.75 A	2%	30W

** To Determine Part Number:

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

Example: SM30P9*24*R indicates a 24VDC Unit.

Note: This model is PSE appoved for 3V - 16V Output.

This model is CEC Level V appoved for 6V - 40V Output.

Dual Output Voltage and Current Chart

Model Number	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Maximum Output Power
SM30P260R	+3.3V @ 3A 7%	+12V @ 1.3A 5%	25W
SM30P250R	+5V @ 3A 5%	+12V @ 1.3A 5%	30W
SM30P253R	+5V @ 3A 5%	+15V @ 1.0A 5%	30W
SM30P254R	+5V @ 3A 5%	+24V @ 0.7A 5%	30W
SM30P259R	+3.3V @ 3A 7%	+5V @ 1.6A 5%	17.9W
SM30P256R	+12V @ 2A 5%	-12V @ 0.5A 10%	30W
SM30P257R	+15V @ 1.5A 5%	-15V @ 0.5A 10%	30W
SM30P262R	+5V @ 2.5A 5%	-24V @ 1.0A 10%	30W

Note: This model is PSE appoved for models SM30P260R, SM30P259R and SM30P257R, SM30P256R, SM30P253R, and SM30P250R.

Triple Output Voltage and Current Chart

Model Number	Output #1 Voltage & Regulation	Output #2 Voltage & Regulation	Output #3 Voltage & Regulation	Maximum Output Power
SM30P377R	+5V @ 2.5A 5%	+12V @ 1.3A 5%	-5V @ 0.5A 10%	25W
SM30P370R	+5V @ 2.5A 5%	+12V @ 1.0A 5%	-12V @ 0.5A 10%	30W
SM30P374R	+5V @ 2.5A 5%	+15V @ 1.0A 5%	-15V @ 0.5A 10%	30W
SM30P376R	+5V @ 3.0A 5%	+24V @ 1.0A 5%	-24V @ 0.5A 10%	30W
SM30P379R	+5V @ 2.5A 5%	+24V @ 1.0A 5%	-12V @ 0.5A 10%	30W
SM30P380R	+3.3V @ 2.5A 7%	+12V @ 1.1A 5%	-5V @ 0.5A 10%	25W

Note: This model is PSE appoved for model SM30P380R, SM30P377R, SM30P374R and SM30P370R.

Note: Output Connector to be specified.
Standard Connector is a 2.5x5.5x11mm Female Barrel Coaxial Plug, Center-Hole Positive (+).
For 6V - 10V Single Output: A 4 ft. (16AWG) cable is required to meet CEC Efficiency Level V.
For 11V - 27V Single Output: A 6 ft. (18AWG) cable is required to meet CEC Efficiency Level V.
For 28V - 40V Single Output: A 6 ft. (20AWG) cable is required to meet CEC Efficiency Level V.