



# SU30P SERIES 30 WATT SWITCHING POWER SUPPLIES LOW PROFILE

## UNIVERSAL INPUT

### FEATURES

- ◆ 2.76" x 5.12" x 1.18" compact size
- ◆ 1.2" in height for low profile version
- ◆ Wide input range 85 to 264 VAC
- ◆ Input surge current protection
- ◆ Overvoltage & overcurrent protection
- ◆ Open PCB construction, L-bracket or box optional
- ◆ 100% burn-in
- ◆ Recognized or certified by UL/CSA/TÜV & CE marked to LVD

### DESCRIPTION

The SU30P series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 25 to 30 watts of continuous output power. They operate at 85 to 264 VAC input voltage without the need of voltage selection. They are ideally suited for use in today's CRT terminals, disk drive systems, small microprocessor based systems and mixed logic environments. All models meet the safety requirements of UL, CSA and IEC.

### INPUT SPECIFICATIONS

Input Voltage:	85 to 264 VAC
Input Frequency:	47 to 63Hz
Input Current:	0.80A (rms) for 115 VAC 0.50A (rms) for 230 VAC
Leakage Current:	0.35mA max. at 110 VAC, 60Hz 0.63mA max. at 230 VAC, 50Hz

### GENERAL SPECIFICATIONS

Switching Frequency:	32kHz $\pm$ 5kHz
Efficiency:	70% min. on single output models with $V_o \geq 15V$ , 65% minimum on all others
Hold-up Time:	12mS min. at 110 VAC
Line Regulation:	$\pm$ 0.5% max. at full load
Inrush Current:	15 amps at 115 VAC 30 amps at 230 VAC
Withstand Voltage:	3000 VAC input to output 1500 VAC input to ground 500 VAC output to ground
MTBF (25°C ambient):	800,000 hours min. full load
EMI Requirements:	In compliance with CISPR 22 (EN 55022) Class B and FCC Class B
Safety Requirements:	Meets or exceeds: UL 1950 CSA C22.2 No. 950 EN 60950/IEC 950

### OUTPUT SPECIFICATIONS

Output Voltage/Current:	See Rating Chart
Total Output Power:	30 watts maximum
Ripple and Noise:	1% peak to peak max.
Overvoltage Protection:	Provided on output #1 only; set at 112-132% of its nominal output voltage
Overcurrent Protection:	All outputs protected to short circuit conditions
Temp. Coefficient:	All outputs, $\pm$ 0.04%/°C max.
Transient Response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 $\mu$ s after a 25% step load change

### ENVIRONMENTAL SPECIFICATIONS

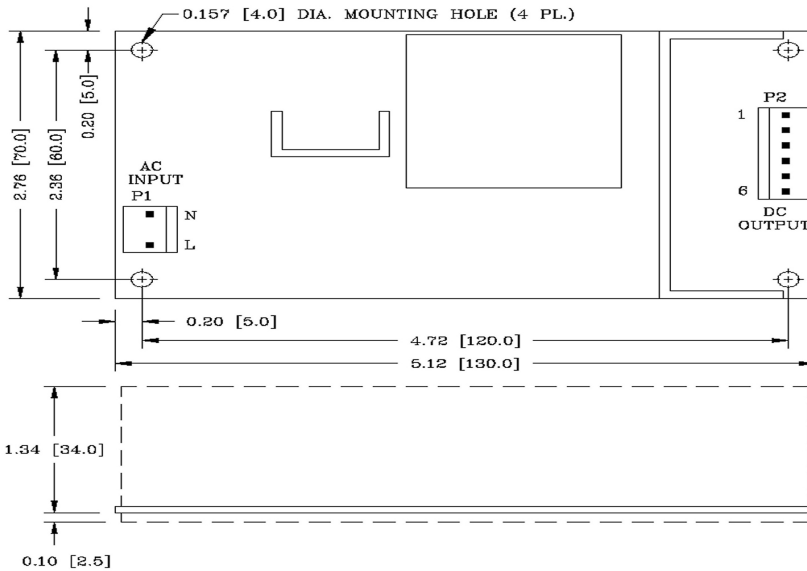
Operating Temperature:	0°C to +70°C
Storage Temperature:	-40°C to +85°C
Relative Humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50°C linearly to 50% at +70°C



Model	Output #1				Output #2				Output #3				Max. Power
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
SU30P10L	+5V	0A	5.0A	2%	(N/A)				(N/A)				25W
SU30P12L	+12V	0A	2.5A	1%	(N/A)				(N/A)				30W
SU30P13L	+15V	0A	2.0A	1%	(N/A)				(N/A)				30W
SU30P14L	+24V	0A	1.3A	1%	(N/A)				(N/A)				30W
SU30P23L	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	(N/A)				30W
SU30P24L	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	(N/A)				30W
SU30P25L	+5V	0.3A	3.0A	3%	+24V	0.1A	1.0A	5%	(N/A)				30W
SU30P30L	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	-5V	0.05A	0.2A	10%	30W
SU30P31L	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	-12V	0.05A	0.2A	10%	30W
SU30P32L	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	-15V	0.05A	0.2A	10%	30W
SU30P33L	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	-12V	0.05A	0.2A	10%	30W

- Notes:
- (1) All multi-output units may be operated at no load without damage; no load output tolerance increases to 10%.
  - (2) Safety agency approvals are for the above listed models in PCB format. To order a model with a metallic L-bracket or box, add suffix "B" for L-bracket format or "C" for enclosed format to the model number e.g., SU30P14LC.

## MECHANICAL SPECIFICATIONS



### Notes:

1. Dimensions shown in inch (mm)
2. Tolerance 0.02 (0.5) maximum
3. Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal
4. Output connector mates with Molex housing 09-50-3061 and Molex 2878 series crimp terminal
5. Weight: 220 grams (PCB format)
6. The four mounting holes are 0.157 (4.0) in diameter.
7. It is strongly recommended to connect the two lower mounting holes to system chassis through metallic stand-offs. This helps reduce output noise greatly.

## PIN CHART

MODEL	PIN	1	2	3	4	5	6
SU30P10L	SU30P12L	Output #1	Output #1	Output #1	Return	Return	Return
SU30P13L	SU30P14L	Output #1	Output #1	Output #1	Return	Return	Return
SU30P23L	SU30P24L	Output #1	Output #1	Common Return	Common Return	N.C.	Output #2
SU30P25L	SU30P24L	Output #1	Output #1	Common Return	Common Return	N.C.	Output #2
SU30P30L	SU30P31L	Output #1	Output #1	Common Return	Common Return	Output #3	Output #2
SU30P32L	SU30P33L	Output #1	Output #1	Common Return	Common Return	Output #3	Output #2

Note: All data are subject to change without notice