

SU66P SERIES 65 WATT SWITCHING POWER SUPPLIES

UNIVERSAL INPUT

FEATURES

- ◆ Recognized or certified by UL/CSA/TÜV
- ◆ Small size
- ◆ Wide input range 90 to 264 VAC
- ◆ Input surge current protection
- ◆ Overvoltage & overcurrent protection
- ◆ 100% burn-in

DESCRIPTION

The SU66P series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 50 to 65 watts of continuous output power. They operate at 90 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, portable equipment and many other applications. All models meet the safety requirements of UL, CSA and IEC.

INPUT SPECIFICATIONS

Input Voltage:	90 to 264 VAC
Input Frequency:	47 to 63Hz
Input Current:	1.60A (rms) for 115 VAC 1.00A (rms) for 230 VAC
Leakage Current:	0.47mA max. at 115 VAC, 60Hz 0.85mA max. at 230 VAC, 50Hz

GENERAL SPECIFICATIONS

Switching Frequency:	42kHz \pm 5kHz
Efficiency:	75% min. on single output models with $V_o \geq 12V$, 66% minimum on all others
Hold-up Time:	10mS min. at 110 VAC
Line Regulation:	\pm 0.5% max. at full load
Inrush Current:	17 amps at 115 VAC 40 amps at 230 VAC (at 25°C cold start)
Withstand Voltage:	3000 VAC input to output 1500 VAC input to ground 500 VAC output to ground
MTBF (25°C ambient):	400,000 hours min. full load, calculated per MIL-HDBK-217F
EMI Requirements:	Meets conducted limits of (a) FCC Level B (b) EN 55022 Class B
Safety Requirements:	Meets or exceeds: UL 60950 CSA C22.2 No. 950 IEC 950 (EN 60950)

OUTPUT SPECIFICATIONS

Output Voltage/Current:	See Rating Chart
Total Output Power:	65 watts maximum
Ripple and Noise:	1% peak to peak max. ($V_o \geq 5V$) 1.5% peak to peak max. ($V_o = 3.3V$)
Overvoltage Protection:	Provided on output #1 only; (V_o have 3.3V provided on output #2); 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 μ s after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

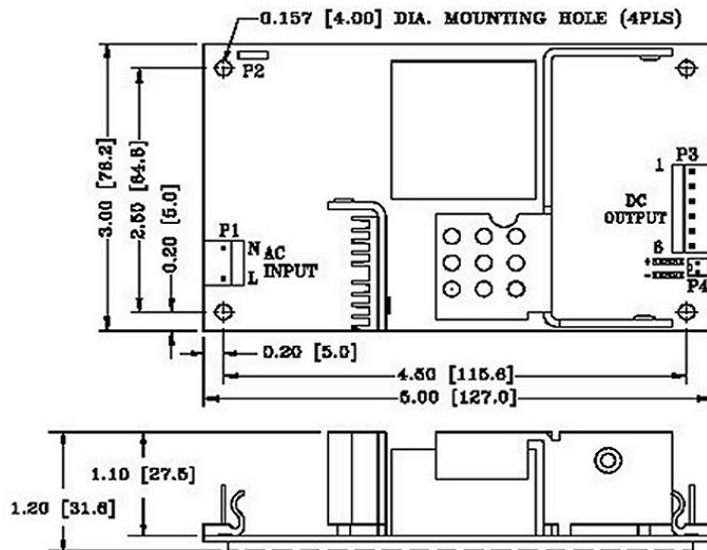
Operating Temperature:	0°C to +70°C
Storage Temperature:	-40°C to +85°C
Relative Humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50°C linearly to 50% at +70°C



Model	Output #1				Output #2				Output #3				Max. Power
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
SU66P10	5.1V	0A	10A	3%	(N/A)				(N/A)				50W
SU66P12	12V	0A	5.5A	2%	(N/A)				(N/A)				65W
SU66P13	15V	0A	4.4A	2%	(N/A)				(N/A)				65W
SU66P14	24V	0A	2.8A	2%	(N/A)				(N/A)				65W
SU66P15	28V	0A	2.4A	2%	(N/A)				(N/A)				65W
SU66P18	48V	0A	1.4A	2%	(N/A)				(N/A)				65W
SU66P23	+5.1V	1A	6.0A	3%	+12V	0.5A	3.0A	5%	(N/A)				65W
SU66P23-3	+3.3V	1A	6.0A	3%	+5.1V	0.5A	5.0A	4%	(N/A)				65W
SU66P25	+5.1V	1A	6.0A	3%	+24V	0.3A	2.0A	5%	(N/A)				65W
SU66P30	+5.1V	1A	6.0A	3%	+12V	0.5A	3.0A	5%	-5V	0.1A	0.5A	5%	65W
SU66P31	+5.1V	1A	6.0A	3%	+12V	0.4A	3.0A	5%	+12V	0.1A	0.5A	5%	65W
SU66P31-3	+3.3V	1A	6.0A	3%	+5.1V	0.5A	4.0A	4%	+12V	0.1A	1.0A	5%	65W
SU66P32	+5.1V	1A	6.0A	3%	+15V	0.4A	3.0A	5%	-15V	0.1A	0.5A	5%	65W
SU66P39	+5.1V	1A	6.0A	3%	+24V	0.3A	2.0A	5%	-12V	0.1A	0.5A	5%	65W

Notes: (1) All multiple output units may be operated at no load without damage. At no load, output voltage tolerance increases to 10%.
 (2) Ripple and noise: Peak-to-peak with 20MHz bandwidth and 10µF in parallel with a 0.1µF capacitor at rated line voltage and load ranges.

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: 330 grams (PCB format)
6. P4 is for single output model ±sense connector mates with Molex housing 22-01-1023 and Molex 40445 series crimp terminal.

PIN CHART

CONN \ PIN		P1		P2	P3						P4	
		1	2	1	1	2	3	4	5	6	1	2
MODEL												
SU66P10	SU66P12	AC Live	AC Neutral	AC Ground	Output #1	Output #1	Output #1	Return	Return	Return	+Sense	-Sense
SU66P13	SU66P14											
SU66P15	SU66P18											
SU66P23	SU66P23-3	AC Live	AC Neutral	AC Ground	Output #2	Output #1	Output #1	Com. Ret.	Com. Ret.	Output #3		
SU66P30	SU66P31											
SU66P31-3	SU66P32	AC Live	AC Neutral	AC Ground	Output #2	Output #1	Output #1	Com. Ret.	Com. Ret.	Output #3		
SU66P39												

Note: All data are subject to change without notice