

- NEW • DESKTOP POWER SUPPLIES**  
**• UNIVERSAL INPUT**  
**• COMPACT**

**60 WATT**

**SWITCHING  
POWER SUPPLY**



**DESCRIPTION**

The HUP60 Series of AC-DC switching power supplies provide 60 watts of continuous output power. They are enclosed in a 94V-0 rated polyphenylene oxide case with an IEC 320 inlet connector to mate with an interchangeable cord for worldwide use. All models meet CISPR22 and FCC Class B emission limits, and are approved to UL, CSA, and TUV safety standards.



**FEATURES**

- 100% Burn-in
- Built-in EMI filter
- Small size, light weight
- Overvoltage protection
- Short circuit protection
- Input surge current protection
- Wide input voltage 90-264 VAC
- Approved to UL, CSA, and TUV safety standards
- CE Mark

**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

Model	Vnom	Output			Tol.	Maximum Output Power
		Imin	Imax			
HUP60-10	5V	0A	10.0A		5%	50W
HUP60-10-1	7V	0A	7.8A		5%	55W
HUP60-11	10V	0A	6.0A		5%	60W
HUP60-12	12V	0A	5.0A		5%	60W
HUP60-13	15V	0A	4.0A		5%	60W
HUP60-13-1	18V	0A	3.3A		5%	60W
HUP60-14	24V	0A	2.5A		5%	60W
HUP60-16	30V	0A	2.0A		5%	60W
HUP60-17	36V	0A	1.6A		5%	60W
HUP60-18	48V	0A	1.2A		5%	60W

## GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

Efficiency:	65% min at 60W output
Hold-up time:	5msec minimum
Line regulation:	±0.5% maximum at full load
Inrush current:	15 amps@115 VAC, or 30 amps@230 VAC at 25°C cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground 500 VAC from output to ground
Insulation resistance:	50 Mohm min. from output to ground
Operating temperature:	0°C to +70°C*
Storage temperature:	-40°C to +85°C
MTBF:	100,000 hours minimum at full load at 25°C ambient
EMI requirements:	Meets conducted and radiated limits of: a) FCC20780 Level B b) CISPR 22 Class B
Safety requirements:	Approved to: a) UL 1950 b) CSA C22.2 No. 234 c) EN60950

## INPUT SPECIFICATIONS

Input voltage:	90 to 264 VAC
Input frequency:	47 to 63 Hz
Input current:	1.6A maximum
Safety ground:	
leakage current:	0.75mA max. @ 240VAC 50Hz

## OUTPUT SPECIFICATIONS

Output voltage:	See rating chart
Output current:	See rating chart
Output power range:	0 to 60 Watts
Ripple and noise:	1% peak to peak maximum
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
Temperature coefficient:	All outputs ±0.04%/°C maximum
Transient response:	Maximum excursion of 4% or better on all models. Recovers to 1% of final value within 500us after a 25% step load change.

\* Derate linearly from 100% load at 40°C to 50% load at 70°C

## MECHANICAL SPECIFICATIONS

### NOTES:

1. Dimensions shown in inches (mm).
2. Tolerance 0.02 (0.5) maximum.
3. Cable length is 48.0".
4. Optional output connectors available consult factory.
5. Weight: 350 grams approx.

