H HiTRON

AC/DC EXTERNAL DESKTOP ADAPTER UNIVERSAL INPUT MULTIPLE OUTPUT 50-60 WATTS SWITCHING POWER SUPPLIES HES61 SERIES



FEATURES:

- **ACCOMMODATE UNIVERSAL AC INPUT**
- **DESKTOP IEC 320-3P AC RECEPTACLE**
- **INPUT & OUTPUT LAMPS INDICATION**
- **MEET UNIVERSAL SAFETY STANDARDS**
- **EMI MEET EN55022/ FCC CLASS B**
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: 90-264Vac typical.

Input Connector: IEC 320-3P AC receptacle.

On-Off Switch: Option for Rocker switch with lamp.

Input Frequency: 47-63Hz.

Inrush Current: 20A @230Vac.

Input Current: 1.3A @115Vac./ 0.6A@230Vac.

Dielectric Withstand: Meet IEC60950.

EMI: Meet EN55022 / FCC Class B.

Hold-up Time: 15mS @115Vac or
75mS @ 230Vac typical.

No Load Operation: No damage at no load.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: 50-60 watts typical.
Output Connection: Optional.
Output LED indicator: Installed.
Line Regulation: 0.1% typical.
Load Regulation: Main O/P VO1 typical ±1.5-3.0%.
Aux. O/P VO2 typical ±3.0-5.0%. (Stacked on VO1).
Aux. O/P VO3 typical ±1.0-2.0%. (P. R. installed).
Noise & Ripple: 1.0% typical peak to peak.
OVP: Built-in on main output by crowbar.
Overload Protection (OLP):
Fully protected against output overload and short circuit.
OLP set at about 125-150% rating output wattage.
Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: 75-80% typical.
Switching Frequency: Approximate 44K Hz.
Circuit Topology: Fixed Frequency Flyback circuit.
Transient Response: Output voltage returns in less than 5mS following a 25% load change.
Safety Standard: Meet UL1950/ EN60950 Class I.
Power Density: 1.36 Watts/ Cubic inch.

Operating Temperature: 0 to +25/35/40°C without derating. (various with output voltage)
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04%/ °C.
Cooling: Free air convection.
Construction: Impact resistant thermo-plastic enclosure case with venting slots.
Desktop Format.

NOTE: (1) The exact voltage regulation obtainable depends upon the cord selected and load current.
(2) Load regulation is measured at 115Vac or 230Vac in percentage to indicate the change in output voltage as the load is varied from half load to full load (unit ±%). For the multi-output, the main output remains 50% load and other aux. output remains 20% load.
(3) The typical cord length 1 meter (about 3.3ft.), AWG#18 cord for various load conditions.
(4) Due to requests in market and advances in technology, specifications subject to change without notice.

For the details of safety approval, please consult the factory.

OUTPUT VOLTAGE/CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN O/P★@	
	TYP.	VOLT.
HES61-10	9.0A	**5.0Vdc** #
HES61-11	4.2A	**12.0Vdc**
HES61-11A	4.0A	**13.2Vdc**
HES61-12	3.4A	**15.0Vdc**
HES61-13	2.2A	**24.0Vdc**
HES61-19	9.0A	**3.3Vdc** #

DUAL OUTPUT

MODEL NO.	MAIN O/P VO1@★			AUX. O/P +VO2 † or-VO3 ●		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
HES61-20	7.0A	**+5Vdc**	9.0A	0.75A	**-5Vdc**	1.0A
HES61-21	5.0A	**+5Vdc**	8.0A	2.00A	**+12Vdc**	3.0A
HES61-21A	7.5A	**+5Vdc**	9.0A	0.50A	**+12Vdc**	1.0A
HES61-22	5.0A	**+5Vdc**	8.0A	1.60A	**+15Vdc**	2.0A
HES61-23	5.0A	**+5Vdc**	8.0A	1.00A	**+24Vdc**	1.5A
HES61-25	2.0A	**+15Vdc**	3.0A	1.70A	**+8Vdc**	2.0A

TRIPLE OUTPUT

MODEL NO.	MAIN O/P VO1 ★@			AUX. O/P VO2 †			AUX. O/P VO3 ●		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
HES61-30	5.0A	**+5Vdc**	8.0A	1.50A	**+12Vdc**	2.0A	0.5A	**-12Vdc**	1.0A
HES61-31	5.0A	**+5Vdc**	8.0A	1.50A	**+12Vdc**	2.0A	0.8A	**-5Vdc**	1.0A
HES61-32	5.0A	**+5Vdc**	8.0A	0.75A	**+24Vdc**	1.0A	0.5A	**-12Vdc**	0.9A
HES61-33	5.0A	**+5Vdc**	8.0A	1.50A	**+15Vdc**	2.0A	0.5A	**-5Vdc**	1.0A
HES61-34	5.0A	**+5Vdc**	8.0A	1.50A	**+15Vdc**	2.0A	0.2A	**-15Vdc**	0.4A

Symbol: "†" Stacked on main output. "●" Installed with Post of Regulator (P.R.). "★" OVP built-in.
"#" Remote sense. "@" Adjustable.

Remark: (1) At least 20% of typical main output current is required to maintain stated regulations.
(2) Max. Load (maximum load) is the continuous operating load of each rail,
but the max. load of each rail can't be drawn from all outputs at the same time.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 531.0g (18.73 Oz.)

