

## AC/DC EXTERNAL WALLMOUNT & DESKTOP ADAPTER UNIVERSAL OR USA INPUT SINGLE OUTPUT 12-13 WATTS SWITCHING POWER SUPPLIES HES13L SERIES



### FEATURES:

- UNIVERSAL INPUT
- LATCH OFF CIRCUIT
- DIVERSE AC PLUG AVAILABLE
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET EN55022/FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** 90-264Vac typical.

**Input Connector:**

Wallmount Format: WM1 (USA/Japan)/ WM3  
(Euro-stecker)/ WM5(UK)/WM6  
Desktop Format: IEC320 Inlet DT8-2P.

**Input Frequency:** 47-63Hz.

**Inrush Current:** Peak 38.4A @230Vac or  
rms 3.14A @230Vac typical.

**Input Current:** 0.25A@115Vac/0.12A@230Vac typical.

**Dielectric Withstand:** Meet IEC60950.

**EMI:** Meet EN55022 / FCC Class B.

**Hold-up Time:** 10mS @115Vac or 74mS @230Vac typical.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.

**Output Current:** See Ratings Chart.

**Output Wattage:** 12-13Watts typical.

**Output Connector:** Optional.

**Line Regulation:** 0.1% typical.

**Load Regulation:**  $\pm 1-3.5\%$  typical.

**Noise & Ripple:** 1.0% typical peak to peak.

**OVP:** Built-in, Latch circuit.

**OTP:** Optional.

**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:** 80% typical.

**Switching Frequency:** Approximate 60K Hz.

**Circuit Topology:** Fixed Frequency Flyback ckt.

**Transient Response:** Output voltage returns in less than 3mS  
following a 25% load change.

**Safety Standard:** UL1950/EN60950, Class II.

**Power Density:** 2.0Watts / Cubic inch.

**Operating Temperature:** 0 to +40°C with no derating.

**Storage Temperature:** -20°C to +85°C.

**Temperature Coefficient:** 0.04% /°C.

**Cooling:** Free air convection.

**Construction:** Impact resistant thermo- plastic  
enclosure case.

**Construction:** Wallmount or Desktop Format.

NOTE: (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.

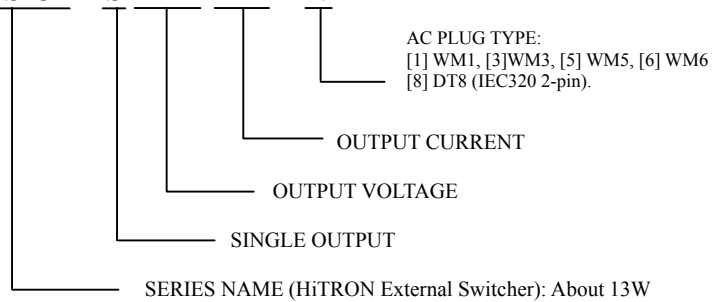
(2) Load regulation is measured at 115Vac or 230Vac in percentage to indicate the change in output voltage as the load is varied from half load to full load (unit  $\pm\%$ ).  
For the multi-output, the main output remains 50% load and other aux. output remains 20% load.

(3) The exact obtainable load regulation depends upon the output load current & cord selected. Upper data are for 6 ft. (2 meters) cord AWG#18/20 wires with PF  
or PD type connector.

(4) Due to requests in market and advances in technology, specifications subject to change without notification.

**MODEL NO. DESCRIPTION: HES13L – S XXX YYY – N**

03/23/2004



**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

**SINGLE OUTPUT** (model No. for examples)

MODEL NO.	AC INPUT	AC PLUG	O/P VOLTAGE (Vdc)	O/P CURRENT(A)	FORMAT
HES13L-S050250-1	90-264Vac	WM1	5.0V	2.50A	Wallmount
HES13L-S050250-3	90-264Vac	WM3	5.0V	2.50A	Wallmount
HES13L-S060200-5	90-264Vac	WM5	6.0V	2.00A	Wallmount
HES13L-S090140-6	90-264Vac	WM6	9.0V	1.40A	Wallmount
HES13L-S090140-8	90-264Vac	DT8	9.0V	1.40A	Desktop
HES13L-S120110-8	90-264Vac	DT8	12.0V	1.10A	Desktop
HES13L-S135100-5	90-264Vac	WM5	13.5V	1.00A	Wallmount
HES13L-S150090-6	90-264Vac	WM6	15.0V	0.90A	Wallmount
HES13L-S150090-1	90-264Vac	WM1	15.0V	0.90A	Wallmount
HES13L-S240050-3	90-264Vac	WM3	24.0V	0.5A	Wallmount
HES13L-S480025-8	90-264Vac	DT8	48.0V	0.25A	Desktop
HES13L-S480025-3	90-264Vac	WM3	48.0V	0.25A	Wallmount

**MECHANICAL DIMENSIONS: MM [INCHES]**

**WEIGHT: 168.0g(5.93Oz)**

