

# HiTRON

## AC/DC EXTERNAL WALLMOUNT & DESKTOP ADAPTER UNIVERSAL OR USA INPUT SINGLE OUTPUT 12 WATTS SWITCHING POWER SUPPLIES HES12 & HES12B SERIES



### FEATURES:

- LOW COST WALLMOUNT ADAPTER
- DIVERSE AC PLUGS AVAILABLE
- MEET DIVERSE SAFETY STANDARDS
- EMI MEET EN 55022 OR FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** HES12 typ. 90-264Vac, rating 100-240Vac.  
HES12B typ. 90-132Vac, rating 120Vac.

**Input Connector:**

HES12: WM1 (U.S.2-blade)/WM3 (Euro-stecker)/  
DT8(IEC320-2P).

HES12B: WM1 (U.S.2-blade).

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

**Inrush Current:**

HES12: 28A @ 230Vac typical by adding thermister.

HES12B: 22.5A @ 115Vac typical.

**Input Current:** HES12 0.15A @ 230Vac typical.

HES12B 0.24A @ 115Vac typical.

**Dielectric Withstand:** Meet IEC60950.

**EMI:** Meet EN 55022 or FCC Class B.

**Hold-up Time:** 13.2mS@115Vac/42.0mS@230Vac.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.

**Output Current:** See Ratings Chart.

**Output Wattage:** 12 Watts typical.

**Output Connector:** Optional.

**Line Regulation:** 0.1% typical.

**Load Regulation:**  $\pm 2-3\%$  typical.

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

**OVP:** Built-in. By Zener diode clamping.

**Adjustability:** Factory set.

**Overload Protection (OLP):**

Fully protected against output overload or short circuit.

OLP set at about 120-150% max. load.

Consult the factory for special OLP setting

#### GENERAL SPECIFICATION

**Efficiency:** 80.5% typical.

**Switching Frequency:** 56-76K Hz.@ full load typical.

**Circuit Topology:** Free-running flyback circuit.

**Transient Response:** Output voltage returns typical 1mS  
following a 25% load change.

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

**Power Density:** 2.3 Watts / Cubic inch.

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

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

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

**Cooling:** Free air convection.

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

**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 230Vac or 120Vac in percentage to indicate the change in output voltage as the load is varied from half load to full load ( $\pm\%$ ).

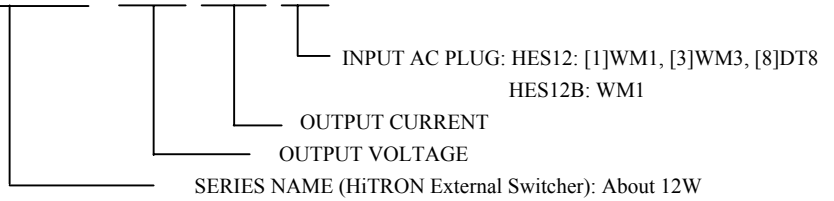
(3) The exact obtainable load regulation depends upon the output cord selected and load current. Upper data are for 6 ft. (2 m) cord AWG#18 wires.



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

Due to requests in market and advances in technology, specifications subject to change without notice.

**MODEL NO. DESCRIPTION: HES12 or B - XXX YYY - S**



**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

**SINGLE OUTPUT**

MODEL NO.	AC INPUT	AC PLUG	O/P VOLTAGE	O/P CURRENT	FORMAT
HES12-033240-1,3,8	90-264Vac	WM1/WM3/DT8	3.3V	2.40A	Wallmount/Desktop
HES12B-033240	90-132Vac	WM1	3.3V	2.40A	Wallmount
HES12-050240-1,3,8	90-264Vac	WM1/WM3/DT8	5.0V	2.40A	Wallmount/Desktop
HES12B-050240	90-132Vac	WM1	5.0V	2.40A	Wallmount
HES12-060200-1,3,8	90-264Vac	WM1/WM3/DT8	6.0V	2.00A	Wallmount/Desktop
HES12B-060200	90-132Vac	WM1	6.0V	2.00A	Wallmount
HES12-065180-1,3,8	90-264Vac	WM1/WM3/DT8	6.5V	1.80A	Wallmount/Desktop
HES12B-065180	90-132Vac	WM1	6.5V	1.80A	Wallmount
HES12-075160-1,3,8	90-264Vac	WM1/WM3/DT8	7.5V	1.60A	Wallmount/Desktop
HES12B-075160	90-132Vac	WM1	7.5V	1.60A	Wallmount
HES12-090130-1,3,8	90-264Vac	WM1/WM3/DT8	9.0V	1.30A	Wallmount/Desktop
HES12B-090130	90-132Vac	WM1	9.0V	1.30A	Wallmount
HES12-120100-1,3,8	90-264Vac	WM1/WM3/DT8	12.0V	1.00A	Wallmount/Desktop
HES12B-120100	90-132Vac	WM1	12.0V	1.00A	Wallmount
HES12-150080-1,3,8	90-264Vac	WM1/WM3/DT8	15.0V	0.80A	Wallmount/Desktop
HES12B-150080	90-132Vac	WM1	15.0V	0.80A	Wallmount
HES12-240050-1,3,8	90-264Vac	WM1/WM3/DT8	24.0V	0.50A	Wallmount/Desktop
HES12B-240050	90-132Vac	WM1	24.0V	0.50A	Wallmount
HES12-480025-1,3,8	90-264Vac	WM1/WM3/DT8	48.0V	0.25A	Wallmount/Desktop
HES12B-480025	90-132Vac	WM1	48.0V	0.25A	Wallmount

**MECHANICAL DIMENSIONS: MM [INCHES]**

**WEIGHT: 113g (4.0 Oz.)**

