



## AC/DC EXTERNAL WALLMOUNT ADAPTER UNIVERSAL INPUT SINGLE OUTPUT 20-36 WATTS SWITCHING POWER SUPPLIES HES25 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC INPUT
- DIVERSE WALLMOUNT AC PLUGS
- 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/ WM2 (USA/Japan), WM3(Euro-Stecker).  
 WM5 (UK) / WM6 (Australia).  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** 28A @230Vac typical.  
**Input Current:** 0.6A @115Vac/0.3A @230Vac.  
**Dielectric Withstand:** Meet IEC60950.  
**EMI:** Meet EN55022/ FCC Class B.  
**Hold-up Time:** 8mS @115Vac typical.  
 35mS @230Vac typical.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Wattage:** 20-36 Watts typical.  
**Output Connector & Cord:** Optional.  
**Line Regulation:** 0.1% typical.  
**Load Regulation:**  $\pm 1.5$ -3% typical.  
**Noise & Ripple:** 1.0% typical peak to peak.  
**OVP:** Built-in, Zener diode clamping.  
**Adjustability:** Factory set.  
**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:** 71-85% typical.  
**Switching Frequency:** Approximate 70K Hz.  
**Circuit Topology:** Fixed Frequency Flyback circuit.  
**Transient Response:** Output voltage returns in less than  
 3mS following a 25% load change.  
**Safety Standard:** Meet UL60950/ EN60950 Class I & II.  
**Power Density:** 2.67 Watts / Cubic inch.

**Operating Temperature:** 0 °C to room temperature.  
**Storage Temperature:** -20 to +85°C.  
**Temperature Coefficient:** 0.04% /°C.  
**Cooling:** Free air convection.  
**Construction:** Impact resistant thermo-plastic  
 enclosure case.  
**Wallmount Format.**

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

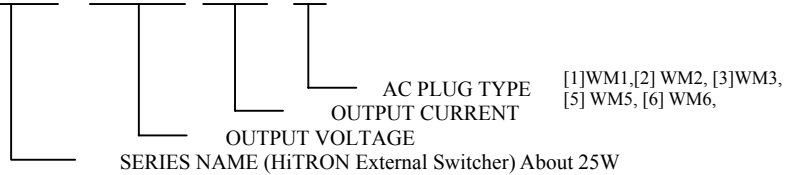
(2) Load regulation is measured at 115Vac or 230Vac in percentage to indicate the change in output voltage as the load varied from half load to full load ( $\pm\%$ ).

(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.

(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.

**MODEL NO. DESCRIPTION: HES25 - X X X YYY - S****OUTPUT VOLTAGE/CURRENT RATINGS CHART**

| DEFINED OUTPUT VOLTAGE                                       | OUTPUT VOLTAGE (Vdc) / CURRENT (A)                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $3.3\text{Vdc} \leq \text{Any Voltage} < 24.0\text{Vdc}$     | 3.3-5.0V/5.0-4.0A, 5.1-6.0V/3.95-3.5A, 6.1-7.4V/3.45-3.0A, 7.5-10.0V/2.98-2.5A, 10.1-15.0V/2.49-2.0A, 15.1-15.7V/1.98-1.91A, 15.8-16.6V/1.89-1.8A, 16.7-17.6V/1.79-1.7A, 17.7- 18.7V/1.69-1.6A, 18.8-20.0V/1.59-1.5A, 20.1-21.4V/1.49- 1.4A, 21.5-23.0V/1.39-1.3A, 23.1-23.9V/1.29-1.25A. |
| $24.0\text{Vdc} \leq \text{Any Voltage} \leq 36.0\text{Vdc}$ | 24.0-25.7V/1.5-1.4A, 25.8-27.6V/1.39-1.3A, 27.7-30.0V/1.29-1.2A, 30.1-32.7V/1.19-1.1A, 32.8-34.2V/1.09-1.05A, 34.3-34.9V/1.04-1.03A, 35.0-36.0V/1.02-1.0A.                                                                                                                                |

Note: Refer to the upper Chart or consult factory for the exact Model No. and V/A .

**SINGLE OUTPUT** *(Model No. for example.)*

| MODEL NO.      | AC PLUG | O/P VOLTAGE | O/P CURRENT |
|----------------|---------|-------------|-------------|
| HES25-033500-1 | WM1     | 3.3Vdc      | 5.00A       |
| HES25-050400-2 | WM2     | 5.0Vdc      | 4.00A       |
| HES25-090270-3 | WM3     | 9.0Vdc      | 2.70A       |
| HES25-120240-5 | WM5     | 12.0Vdc     | 2.40A       |
| HES25-150200-6 | WM6     | 15.0Vdc     | 2.00A       |
| HES25-180166-1 | WM1     | 18.0Vdc     | 1.66A       |
| HES25-230130-2 | WM2     | 23.0Vdc     | 1.30A       |
| HES25-240150-3 | WM3     | 24.0Vdc     | 1.50A       |
| HES25-300120-5 | WM5     | 30.0Vdc     | 1.20A       |
| HES25-360100-6 | WM6     | 36.0Vdc     | 1.00A       |

**MECHANICAL DIMENSIONS: MM [INCHES]****WEIGHT: 240g (8.5Oz).**