



UNIVERSAL INPUT AC TO DC EXTERNAL DESKTOP ADAPTER SINGLE OUTPUT 50-54 WATTS SWITCHING POWER SUPPLIES HES52 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC INPUT
- DESKTOP IEC320-3P AC RECEPTACLE
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET EN55022 / FCC CLASS B
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: 90-264Vac typical.
Input Connector: IEC320-3P DT7 or DT7L
AC inlet receptacle.
Input Frequency: 47 ~ 63Hz.
Inrush Current: 30A @230Vac.
Input Current: 0.9A @115Vac. & 0.4A @230Vac.
Dielectric Withstand: Meet IEC950.
EMI: Meet EN55022 / FCC Class B.
Hold-up Time: 15mS typ. @115Vac.
75mS typ. @230Vac.
Over Temperature Protection: Optional.
Over Current Protection (OCP): Optional.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typ.50-54W
Output Connector & Cord: Optional.
Output LED: Installed.
Line Regulation: 0.1% typical.
Load Regulation: $\pm 1.5 \sim 3.0\%$ typical.
Noise & Ripple: Typ. 1.0% peak to peak.
OVP: Built-in, Zener diode clamping.
Adjustability: Factory set.
Overload Protection: Typ.125-150% of max. power
overrange or short circuit, power foldback
& self-recovering.

GENERAL SPECIFICATION

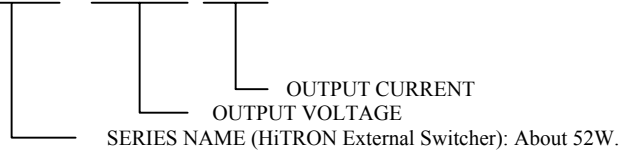
Efficiency: Typ.80 ~ 85%.
Switching Frequency: Approximate 77K Hz.
Circuit Topology: Fixed Frequency flyback circuit.
Transient Response: Output voltage returns in
less than 3mS following a 25% load change.
Safety Standard: UL1950/EN60950 Class I.
Power Density: 4.1Watts. / Cubic Inch.
Operating Temperature: 0 to +40°C.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04% /°C.
Cooling: Free air convection.
Construction: Impact resistant thermo-plastic case.
Desktop Format.

Notes: (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 ($\pm\%$).

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



MODEL NO. DESCRIPTION: HES52 - X X X YYY**OUTPUT VOLTAGE/CURRENT RATINGS CHART**

DEFINED OUTPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc) / CURRENT (A)
$3.3\text{Vdc} \leq \text{Any Voltage} \leq 15.0\text{Vdc}$	3.3-4.0V/6.5-6.23A, 4.1-5.0V/6.2-6.0A, 5.1-6.6V/5.98-5.6A, 6.7-7.8V/5.58-5.3A, 7.9-9.0V/5.28-5.0A, 9.1-10.0V/4.97-4.7A, 10.1-11.2V/4.68-4.4A, 11.3-12.0V/4.38-4.2A, 12.1-13.0V/4.18-4.0A, 13.1-13.8V/3.97-3.8A, 13.9-15.0V/3.78-3.4A.
$15.0\text{Vdc} < \text{Any Voltage} \leq 24.0\text{Vdc}$	15.1-16.0V/3.39-3.3A, 16.1-17.5V/3.28-3.0A, 17.6-19.0V/2.98-2.7A, 19.1-20.0V/2.69-2.6A, 20.1-21.0V/2.59-2.5A, 21.1-22.0V/2.49-2.4A, 22.1-23.0V/2.39-2.3A, 23.1-24.0V/2.29-2.2A.

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

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

MODEL NO.	O/P VOLTAGE (Vdc)	O/P CURRENT (A)
HES52-033650	3.3V	6.5A
HES52-050600	5.0V	6.0A
HES52-090500	9.0V	5.0A
HES52-120420	12.0V	4.2A
HES52-150340	15.0V	3.4A
HES52-190270	19.0V	2.7A
HES52-240220	24.0V	2.2A

MECHANICAL DIMENSIONS: MM [INCHES]**WEIGHT: 185.0g (6.53 Oz.)**