H HiTRON

AUTO-RANGING INPUT AC TO DC EXTERNAL DESKTOP ADAPTER MULTIPLE OUTPUT 100-120 WATTS SWITCHING POWER SUPPLIES HES100 SERIES



FEATURES:

- **AUTO-RANGING ACCOMMODATE AC SOURCES IN THE WORLD**
- **IMPACT RESISTANT THERMO-PLASTIC LOW-PROFILE ENCLOSURE**
- **MEET UNIVERSAL SAFETY STANDARDS**
- **CONDUCTED EMI MEET EN55022 / FCC CLASS B, RADIATED EMI MEET CLASS A**
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Auto-ranging 115Vac for range 90-132Vac and 230Vac for range 180-264Vac. Transient threshold 150Vac typical.
Input Connector: IEC320 3P AC Inlet/Outlet receptacle, with AC On/Off switch.
Input Frequency: 47-63Hz.
Inrush Current: 20A peak. @115Vac, 40A @230Vac.
Input Current: 2.5A @115Vac, 1.1A @ 230Vac.
Dielectric Withstand: Meet IEC950.
EMI: Conducted EMI meet EN55022 / FCC Class B. Radiated EMI meet Class A,
Hold-up Time: 22mS @115Vac./ 27mS @230Vac.
Power Fail Signal: Option in all series.
Logic Inhibit: Optional in single & dual output series.
Remote Sensing: Optional for single & dual output series.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typ.100-120 Watts.
Output Connector & Cable: Optional. Cord length typ. 3 ft.(1 meter).
Line Regulation: VO1, VO3 & VO4 ±0.1% typ. Aux.VO2 ±0.5% typ.
Load Regulation: At strain relief end. Main O/P VO1 ±1.0% typ. Aux. O/P VO2 ±2.0% typ. with Mag. Amp. or ±5.0% typ. with Stacked on. Aux. O/P VO3 & VO4 ±1.5% typ. with PR.
Noise & Ripple: Typ.1.0% peak to peak.
OVP: Main O/P only set @124% ±8% VO1.
Overload Protection: 125-150% of max. power overrange or short circuit, power foldback & self-recovering.

GENERAL SPECIFICATION

Efficiency: Typ. 75%.
Switching Frequency: Fixed Frequency at 100K Hz.
Circuit Topology: Fixed Frequency Forward circuit.
Transient Response: Output voltage returns in less than 3mS following a 25% load change.
Safety Standard: UL1950/EN60950 Class I.
Construction: Desktop enclosure plastic box.
Power Density: 0.88Watts / Cubic Inch.
Operating Temperature: 0 to +40°C.
Storage Temperature: -20 to +85°C.
Temperature Coefficient: 0.04% /°C.
Cooling: Built-in 6.5CFM 40mm fan cooling.
Long Term Stability: After 20 minutes warm-up, 0.1% for 8 hours.
Industrial or Commercial Grade Option: " Industrial" higher MTBF, " Commercial" lower cost.

Note: (1) At least 20% of typical main output current is required to maintain stated regulation.
(2) Cord length typical 3 ft. (or 1 meter).

OUTPUT VOLTAGE/CURRENT RATINGS CHART

SINGLE OUTPUT

MODEL NO.	MAIN O/P VO1 ★#		
	Typ.	**Volt.**	Peak
HES100-11	8.3A	**12.0V**	10.0A
HES100-12	6.7A	**15.0V**	8.0A
HES100-13	4.2A	**24.0V**	5.0A

DUAL OUTPUT

MODEL NO.	MAIN O/P VO1 ★◇			AUX. O/P VO2 ▲◇		
	Typ.	**Volt.**	Max.	Typ.	**Volt.**	Max.
HES100-21	10.0A	**5.0V**	15.0A	4.0A	**5.0V**	3.5A
HES100-22	10.0A	**5.0V**	15.0A	3.0A	**12.0V**	3.0A
HES100-23	6.0A	**5.0V**	12.0A	3.0A	**24.0V**	3.0A
HES100-24	4.5A	**12.0V**	5.0A	4.5A	**12.0V**	5.0A
HES100-25	3.5A	**15.0V**	5.0A	3.4A	**15.0V**	4.0A

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.
HES100-30	12.0A	**+5.0V**	13.0A	3.0A	**+12.0V**	3.5A	0.8A	**12.0V**	1.0A
HES100-31	12.0A	**+5.0V**	13.0A	3.0A	**+12.0V**	3.5A	0.8A	**5.0V**	1.0A
HES100-32	12.0A	**+5.0V**	13.0A	1.5A	**+24.0V**	2.0A	0.8A	**12.0V**	1.0A
HES100-33	12.0A	**+5.0V**	13.0A	3.0A	**+15.0V**	3.3A	0.3A	**15.0V**	1.0A

QUAD OUTPUT

MODEL NO.	MAIN O/P VO1 ★			AUX. O/P VO2 †			AUX. O/P ± VO3 ●			AUX. O/P ±VO4 ●		
	Typ.	**Volt.**	Max.	Typ.	**Volt.**	Max.	Typ.	**Volt.**	Max.	Typ.	**Volt.**	Max.
HES100-40	12.0A	**+5.0V**	13.0A	2.5A	**+12.0V**	3.0A	0.8A	**12.0V**	1.0A	0.5A	**12.0V**	1.0A
HES100-41	12.0A	**+5.0V**	13.0A	2.5A	**+12.0V**	3.0A	0.8A	**5.0V**	1.0A	0.6A	**5.0V**	1.0A
HES100-42	12.0A	**+5.0V**	13.0A	1.0A	**+24.0V**	1.5A	0.8A	**12.0V**	1.0A	0.5A	**12.0V**	1.0A
HES100-43	12.0A	**+5.0V**	13.0A	2.2A	**+15.0V**	2.7A	0.6A	**12.0V**	1.0A	0.4A	**15.0V**	1.0A

Symbols:" ★"OVP built-in. "@"Adjustable. "◇" Floating(or isolated) output. "●" Installed with Post Regulator (PR). "†"Stacked on main output. "#" Remote sensing. "▲" Installed with magnetic amplifier. " ± " Positive or Negative selectable (factory set).

MECHANICAL DIMENSIONS: MM [INCHES] **WEIGHT:** 1,242.0g (43.8 Oz.)

