

# HiTRON

## AC/DC MEDICAL APPLICATION EXTERNAL ADAPTER UNIVERSAL INPUT SINGLE OUTPUT 45-50 WATTS SWITCHING POWER SUPPLIES HES49 SERIES



### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- DESKTOP IEC320-2P/3P AC RECEPTACLE
- MEET MEDICAL STANDARDS EN60601-1/  
UL2601-1
- EMI MEET EN 55011/ FCC CLASS B
- CE MARKING COMPLIANCE

### SPECIFICATION

#### INPUT SPECIFICATION

**Input Voltage:** 90-264Vac typical.  
**Input Connector:** IEC320-3P DT7 or 2P DT8  
AC input receptacle.  
**Input Frequency:** 47-63Hz.  
**Inrush Current:** 32A @230Vac.  
**Input Current:** 0.79A@115Vac & 0.37A @230Vac.  
**Dielectric Withstand:** Meet IEC60601-1.  
**EMI:** Meet EN55011 / FCC Class B.  
**Hold-up Time:** 15mS @115Vac typical.  
60mS @230Vac typical.  
**Over Temp. Protection:** Optional (NTC ckt.).  
**Earth Leakage:** Less than 0.1 mA.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Wattage:** 45-50Watts typical.  
**Output Connector & Cord:** Optional.  
**Line Regulation:** 0.1% typical.  
**Load Regulation:**  $\pm 1.5$ -3.0% typical.  
**Noise & Ripple:** 1.0% typical peak to peak.  
**OVP:** Built-in by latch circuit.  
**Adjustability:** Factory set.  
**Over Current Protection (OCP):** Installed.  
Current limiting can be set precisely as per request.  
**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:** 85-87% typical.  
**Switching Frequency:** 85-110K Hz typical.  
**Circuit Topology:** Fixed Frequency Flyback circuit.  
**Transient Response:** Output voltage returns in less than  
3mS following a 25% load change.  
**Safety Standard:** Meet Medical standards UL2601-1/  
EN60601-1, Class I for DT7 or Class II for DT8 type.  
**Power Density:** 3.3Watts. / 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.  
**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 varied from half load to full load ( $\pm\%$ ).

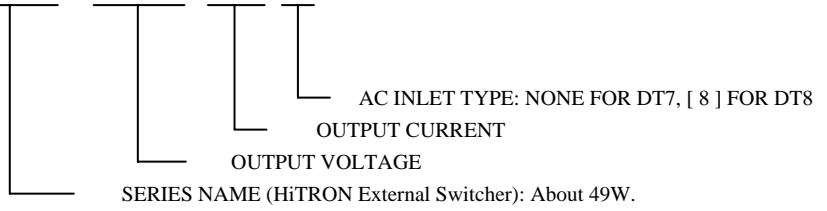
(3) The exact obtainable load regulation depends upon the output cord selected and load current. Upper data are for 6 ft. (2 m)cord AWG#18 wires.

(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: HES49 - X X X Y Y - S**



**OUTPUT VOLTAGE / CURRENT RATINGS CHART**

**SINGLE OUTPUT**

MODEL NO.	AC PLUG	O/P VOLTAGE	O/P CURRENT
HES49-05060	DT7	5.0Vdc	6.0A
HES49-07550	DT7	7.5Vdc	5.0A
HES49-12040	DT7	12.0Vdc	4.0A
HES49-15033	DT7	15.0Vdc	3.3A
HES49-24021	DT7	24.0Vdc	2.1A
HES49-30020	DT7	30.0Vdc	2.0A
HES49-12040-8	DT8	12.0Vdc	4.0A
HES49-15033-8	DT8	15.0Vdc	3.3A
HES49-24021-8	DT8	24.0Vdc	2.1A
HES49-30020-8	DT8	30.0Vdc	2.0A

**MECHANICAL DIMENSIONS: MM [INCHES]**

**WEIGHT: 373.0g (13.2 Oz.)**

