

# AC/DC MEDICAL APPLICATION EXTERNAL ADAPTER UNIVERSAL INPUT SINGLE OUTPUT 22-24 WATTS SWITCHING POWER SUPPLIES HES22 SERIES



## **FEATURES:**

- UNIVERSAL AC SOURCES
- DESKTOP IEC320 AC RECEPTACLE
- MEDICAL STANDARDS EN60601-1/ UL2601-1
- EMI MEET EN55011 / FCC CLASS B
- **CE MARKING COMPLIANCE**

# **SPECIFICATION**

## INPUT SPECIFICATION

Input Voltage: 90-264Vac typical.

Input Connector: IEC320-3P DT7 AC receptacle.

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

Inrush Current: 30A @ 230Vac &15A @ 110Vac typical.

**Input Current:** 0.60A @ 115Vac typical.

0.30A @ 230Vac typical. **Dielectric Withstand:** Meet IEC60601-1.

**EMI:** Meet EN 55011 & FCC CLASS B. **Hold-up Time:** 16mS @115Vac typical.

64mS @230Vac typical.

Earth Leakage: Less than 0.1 mA @264Vac.

#### **OUTPUT SPECIFICATION**

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: 22-24Watts typical.
Output Connector & Cord: Optional.
Line Regulation: 0.1% typical.
Load Regulation: ±1.5-3.0 % typical.
Noise & Ripple: 1.0% typical peak to peak.

OVP: Built-in, by latched circuit. 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: 80% typical.

**Switching Frequency:** 75K Hz typical.

Circuit Topology: Fixed Frequency Flyback circuit.

Transient Response: Output voltage returns in less than

3mS following a 50% load change.

**Safety Standard:** Meet Medical standards EN 60601-1/

UL 2601-1 Class I.

**Power Density:** 1.75Watts / Cubic inch

**Operating Temperature:** 0 to +25/35/40°C

without derating. (various with output voltage)

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

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

**Cooling:** Free air convection.

**Construction:** Impact resistant thermo- plastic enclosure case SE100 94V.0 Nylon.

**Desktop construction 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(±%).
- (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.





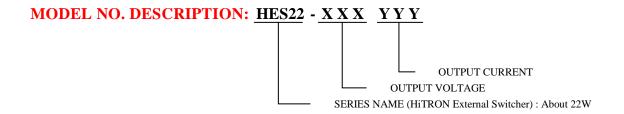






For the details of safety approval, please consult the factory.



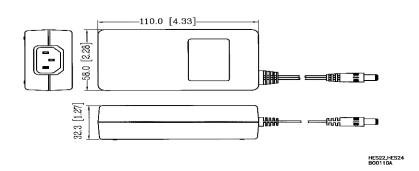


# **OUTPUT VOLTAGE/CURRENT RATINGS CHART**

## **SINGLE OUTPUT**

MODEL NO.	AC PLUG	O/P VOLTAGE	O/P CURRENT
HES22-033400	DT7	3.3Vdc	4.00A
HES22-050400	DT7	5.0Vdc	4.00A
HES22-075300	DT7	7.5Vdc	3.00A
HES22-090250	DT7	9.0Vdc	2.50A
HES22-120200	DT7	12.0Vdc	2.00A
HES22-150160	DT7	15.0Vdc	1.60A
HES22-210115	DT7	21.0Vdc	1.15A
HES22-240100	DT7	24.0Vdc	1.00A
HES22-300080	DT7	30.0Vdc	0.80A

**MECHANICAL DIMENSIONS: MM [INCHES]** WEIGHT: 206.0g (6.23 Oz.).



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