

MENT1220

Universal 220 Watt Series

Medical Switch-Mode Power Supply



3Year Warranty

- Universal Input 100Vac – 240Vac
- Single Output to 220W
- Desktop Style/Non-vented case - No internal fan!
- Ribbed Case Surface to improve cooling
- Energy Star 2.0, Level V
- Certified to EN60601-1-2
- IPX1 Rated Enclosure
- 4 Models Available
- Modified and Custom Designs



International Safety Standard Approvals



Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

| Output Specifications | | |
|-----------------------|------------------|---|
| Line and Load | Line | +/-0.5% maximum |
| Voltage Regulation | Load | +/-2% maximum |
| Ripple | | 1% Vp-p max. (20Mhz bandwidth) |
| Transient Response | | 5mS for 50% Load Change, 0.2A/µS current slew rate. Max/ voltage deviation is 5%. |
| Hold-up Time | @ 115VAC | 16.7mS, min. |
| Protection | Overcurrent | 110-150% of full load, auto-recovery |
| | Short Circuit | Hiccup Mode, Auto-recovery |
| | Overvoltage | 130% of nominal output |
| | Over temperature | Provided, Auto-recovery |

| Input Specifications | | |
|----------------------|-----------------|------------------------------------|
| Input Voltage Range | Universal Input | 100-240VAC, +/-10% |
| Line Frequency | | 47-63Hz |
| No Load Power | | <0.5W |
| Input Current | 115VAC | 3.0A max. |
| | 230VAC | 1.5A max. |
| Protection | Input fuse | Internal 6.3A Primary Current Fuse |
| | Inrush Current | 75A max. @ 264VAC, Cold Start |

| Environmental Specifications | | |
|------------------------------|----------------|-------------------------------------|
| Temperature Range | Operating | 0°-40°C, derate to 60% load at 70°C |
| | Non-operating | -20°C to +85°C |
| Relative Humidity | Non-condensing | 5% to 95% |
| Altitude | Operating | 0 to 10,000 feet |
| | Non-operating | -500 to 40,000 feet |

| General Specifications | | |
|--------------------------------|---|--------------------------|
| Switching Frequency | | 50 - 120Khz, variable |
| Efficiency | | 92% typical |
| Turn-On Time | | 3 sec. maximum at 115VAC |
| Leakage Current | | <260µA at 264VAC |
| Approvals and Safety Standards | | UL60601-1 |
| | | TUV/EN60601-1 |
| | | IEC60601-1 |
| MTBF | 25°C @ full load | 100,000 Calculated Hours |
| Dielectric Withstand | Input-Output | 4,000VAC |
| | Input-Ground | 1500VAC |
| | Output-Ground | 700VDC |
| Case and Dimensions | Desktop Style: | 8.4"L x 4.25"W x 1.85"H |
| Case Material | | Black 94V0 Polycarbonate |
| Output Connections | | See chart |
| EMC Specifications | FCC Part 15 | Subpart B |
| | EN55011 | Class B |
| | EN61000-3-2 | Class A |
| | EN61000-3-3 | Line Flicker |
| | EN61000-4-2 Air | 8kV |
| | EN61000-4-2 Contact | 6kV |
| | EN61000-4-3 | 3V/m |
| | EN61000-4-4 | 2kV/5Khz |
| | EN61000-4-5 | 1kV diff., 2kV common |
| | EN61000-4-6 | 3Vrms |
| | EN61000-4-8 | 3A/M, Criteria A |
| EN61000-4-11 | Criteria A, 100VAC, 60Hz; 40%/5 cycles with 70% load. | |

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OUTPUT PARAMETERS

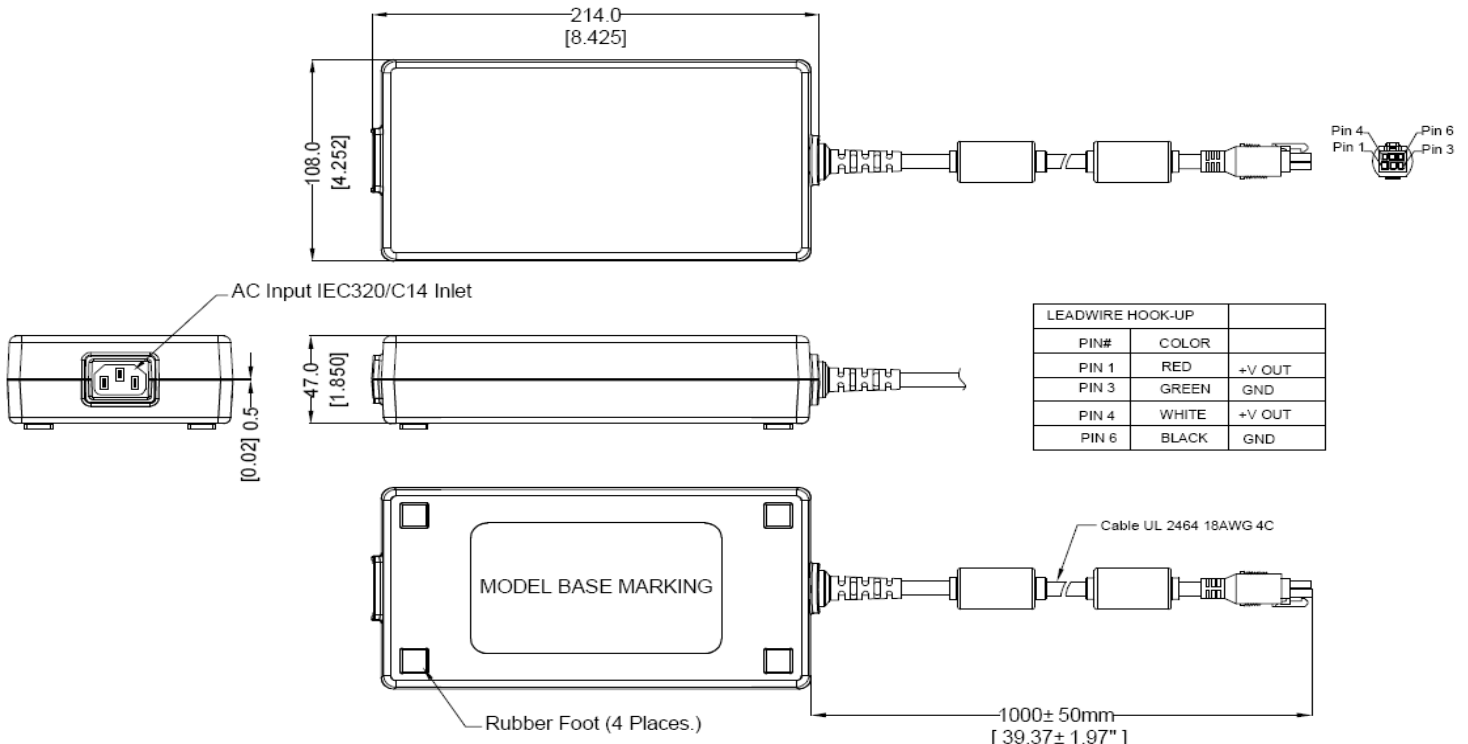
| Model Number | Output Volts | Output Current (max) | Max Watts | Ripple (Vp-p max) |
|------------------|--------------|----------------------|-----------|-------------------|
| MENT1220A2451F01 | 24V | 9.17A | 220W | 240mV |
| MENT1220A2851F01 | 28V | 7.85A | 220W | 280mV |
| MENT1220A3251F01 | 32V | 6.90A | 220W | 320mV |
| MENT1220A4851F01 | 48V | 4.58A | 220W | 480mV |

Model Number Key

MENT 1 220 A VV 51 F 01

- Model Configuration:** "01" = Standard. "02" and higher indicates a modified model.
- Input Connector:** "F" = IEC320 C14 grounded
- Output Connector:** "51" = Molex 39-01-2060 (or equiv.) connector, see below for pinout and mating information.
- Output Voltage:** "24" = 24Vdc, "28" = 28Vdc, "32" = 32Vdc, "48" = 48Vdc
- Model Configuration:**
- Output Power:** "220" = 220 Watts
- # of Outputs**
- Product Family:** "M" = Medical, "E" = External, "NT" = New Technology

Outline Drawing



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