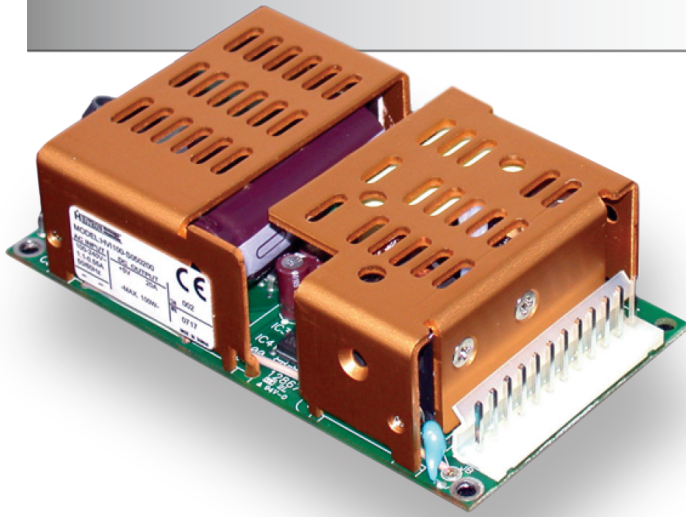


## APS100MI SERIES:



### 100 Watt Medical Switcher

- 4.50 x 2.50 x 1.20" Open Frame PCB

#### Features:

- Universal AC Input
- EN6100-3-2 Class A Compliant
- International Safety Approvals
- 2 Year Warranty

#### INPUT:

|                  |                                   |
|------------------|-----------------------------------|
| Input Voltage    | Universal Input (90~264 VAC)      |
| Input Frequency  | 47-63Hz                           |
| Inrush Current   | 9.68ArmsA @ 240 VAC Cold Start    |
| Input Current    | 1.8A (max continuous)             |
| Input Protection | Dual Fuse                         |
| Hold-Up Time     | 12.8mS @ 115 VAC / 76mS @ 230 VAC |
| Leakage Current  | <189µA @ 230 VAC Maximum          |
| Power Factor     | EN61000-3-2 Class A Compliant     |

#### GENERAL:

|                       |   |
|-----------------------|---|
| Efficiency            | 74~80% minimum  |
| Operating Temperature | 0-50°C Full Load, derate linearly to 50% Load at 70°C |
| Storage Temperature   | -20°C to +85°C  |
| Over-Temp Protection  | Included  |
| Cooling               | Convection Cooled Operation                           |
| Operating Humidity    | 5-90% RH, Non-Condensing                              |
| Vibration             | 5 ~ 50 Hz, acceleration 7.35 m/s*s on X,Y and Z Axis  |
| MTBF                  | >100k Hrs (according to MIL-HBK-217F) at 30°C         |

#### OUTPUT:

|                          |   |
|--------------------------|---|
| Adjustment Range         | ±5% (tracking)                                    |
| Minimum Load             | 10% on V1 for Multi Output Models Only            |
| Regulation               | V1 & V2 = ±1%, V3 & V4 = ±5% max                  |
| Ripple & Noise           | ±1% typical pk-pk @ 20MHz                         |
| Overload Protection      | 115-140% of max power (Hiccup Mode)               |
| Over Voltage             | Latching before 130% of nominal (V1 only)         |
| Short Circuit Protection | Trip without damage & auto-recovery               |
| Overshoot                | Turn-on & off overshoot < 5% over nominal voltage |

#### EMC:

|                         |  |
|-------------------------|--|
| Electrostatic Discharge | EN61000-4-2, ±4KV Contact / ±8KV Air Discharge |
| Radiated Susceptibility | EN61000-4-3, 26-1000MHz, 10V/M, 80% AM         |
| EFT / Bursts            | EN61000-4-4, ±2KV                              |
| Surges                  | EN61000-4-5, ±2KV Line-Earth, ±1KV Line-Line   |
| Conducted Immunity      | EN61000-4-6, 0.15-800MHz, 10V, 80% AM          |
| Voltage Dips            | EN61000-4-10, 95% Dip & 10ms, 30% Dip & 500ms  |
| Voltage Interruptions   | EN61000-4-11, 95% reduction, 5s                |
| Fluctuations & Flicker  | EN61000-3-3                                    |

#### APPROVALS:

Emissions EN55022 "B", FCC Part 15 Subject J Class B

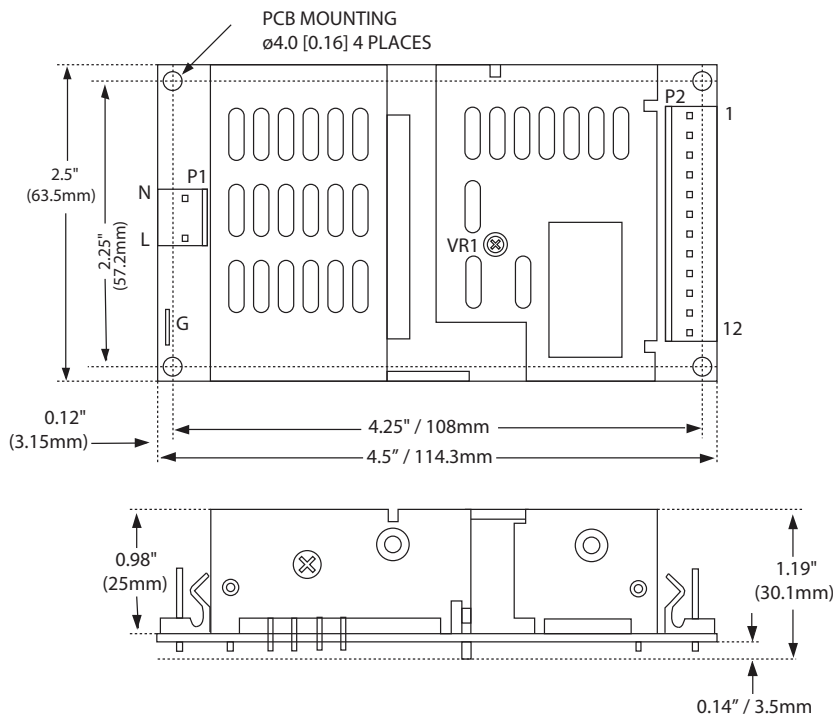
Safety Approvals UL/cUL 60601-1  
EN60950-1  
CE Mark (LVD)

## APS100MI Series:

### Output Specifications:

| Model:           | V1      | A1    | V2      | A2   | V3      | A3   | V4      | A4   |
|------------------|---------|-------|---------|------|---------|------|---------|------|
| APS100MI-S033160 | +3.3 V  | 16.0A |         |      |         |      |         |      |
| APS100MI-S050200 | +5.0 V  | 20.0A |         |      |         |      |         |      |
| APS100MI-S090111 | +9.0 V  | 11.1A |         |      |         |      |         |      |
| APS100MI-S120075 | +12.0 V | 7.5A  |         |      |         |      |         |      |
| APS100MI-S150060 | +15.0 V | 6.0A  |         |      |         |      |         |      |
| APS100MI-S330030 | +33.0 V | 3.0A  |         |      |         |      |         |      |
| APS100MI-S480021 | +48.0 V | 2.1A  |         |      |         |      |         |      |
| APS100MI-D050I   | + 5.0V  | 12.0A | +12.0V  | 3.0A |         |      |         |      |
| APS100MI-D050K   | +5.0V   | 12.0A | +15.0V  | 3.0A |         |      |         |      |
| APS100MI-T050II  | +5.0V   | 10.0A | +12.0 V | 3.0A | -12.0 V | 0.8A |         |      |
| APS100MI-T050IE  | +5.0V   | 10.0A | +12.0 V | 3.0A | -5.0 V  | 0.8A |         |      |
| APS100MI-T050KK  | +5.0V   | 10.0A | +15.0 V | 2.5A | -15.0 V | 0.8A |         |      |
| APS100MI-T050KE  | +5.0V   | 10.0A | +15.0 V | 3.0A | - 5.0 V | 0.8A |         |      |
| APS100MI-T050MI  | +5.0V   | 10.0A | +24.0 V | 1.5A | -12.0 V | 0.8A |         |      |
| APS100MI-Q050IIE | +5.0V   | 10.0A | +12.0 V | 3.0A | -12.0V  | 0.8A | -5.0 V  | 0.5A |
| APS100MI-Q050KKE | +5.0V   | 10.0A | +15.0 V | 3.0A | -15.0V  | 0.8A | -5.0 V  | 0.5A |
| APS100MI-Q050MII | +5.0V   | 10.0A | +24.0 V | 1.5A | +12.0V  | 0.8A | -12.0 V | 0.5A |
| APS100MI-Q050MKK | +5.0V   | 10.0A | +24.0 V | 1.5A | +15.0V  | 0.8A | -15.0 V | 0.5A |

### OUTLINE DRAWING:



### Connectors / Pin Assignments

Mating Connector is Molex 5195 / 5239 Series

#### INPUT CONNECTION:

| Pin  | Function |
|------|----------|
| P1-L | LINE     |
| P1-N | NEUTRAL  |

#### OUTPUT CONNECTION:

| PIN   | FUNCTIONS |        |         |        |
|-------|-----------|--------|---------|--------|
|       | SINGLES   | DUALS  | TRIPLES | QUADS  |
| P2-1  | V1 OUT    | V1 OUT | V1 OUT  | V1 OUT |
| P2-2  | V1 OUT    | V1 OUT | V1 OUT  | V1 OUT |
| P2-3  | V1 OUT    | V1 OUT | V1 OUT  | V1 OUT |
| P2-4  | V1 OUT    | V1 OUT | V1 OUT  | V1 OUT |
| P2-5  | DC COM    | DC COM | DC COM  | DC COM |
| P2-6  | DC COM    | DC COM | DC COM  | DC COM |
| P2-7  | DC COM    | DC COM | DC COM  | DC COM |
| P2-8  | DC COM    | DC COM | DC COM  | DC COM |
| P2-9  | -         | V2 OUT | V2 OUT  | V2 OUT |
| P2-10 | -         | V2 OUT | V2 OUT  | V2 OUT |
| P2-11 | -         | -      | -       | V4 OUT |
| P2-12 | -         | -      | V3 OUT  | V3 OUT |