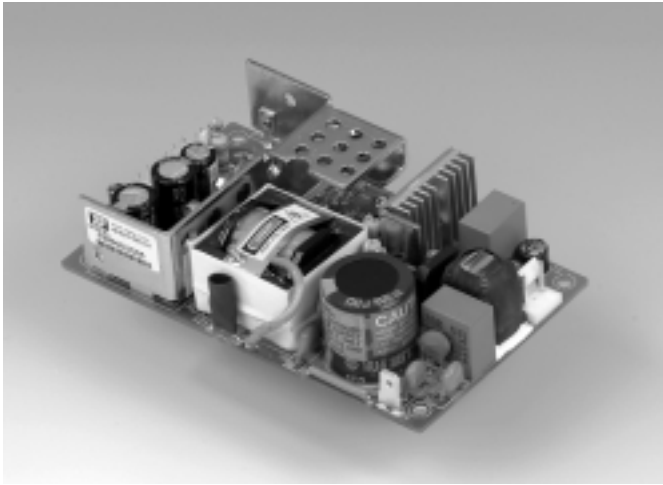


# Medical Open Frame

## 65 Watts PBM65 Series



## THE XPERTS IN POWER

- 4000 VAC Isolation
- 
- Low Leakage Current
- 
- Meets Class B, EN55011 Conducted
- 
- Medical Safety Agency Approvals
- 
- Both Line and Neutral Fused
- 
- Fixed Switching Frequency

### Specification

#### Input

- Input Voltage* • 85-264 VAC
- Input Frequency* • 47-63 Hz
- Input Current* • 1.6 A max at 115 VAC  
1.0 A max at 230 VAC
- Inrush Current* • 17 A max at 115 VAC  
40 A max at 230 VAC
- Earth Leakage Current* • 90  $\mu$ A max at 115 VAC, 60 Hz  
150  $\mu$ A max at 230 VAC, 50 Hz

#### Output

- Output Voltage* • 5.1 to 28 VDC
- Output Voltage Adjustment* •  $\pm 5\%$
- Output Power* • 65 Watts
- Minimum Load* • No minimum load required
- Line Regulation* •  $\pm 0.5\%$  max at full load
- Load Regulation* •  $\pm 2\%$  typical
- Ripple and Noise* •  $\pm 1\%$  pk-pk max (See Note 2)
- Transient Response* • 4% maximum deviation, 500  $\mu$ s recovery time to within 1% for a 25% load change
- Temperature Coefficient* •  $\pm 0.04\%/^{\circ}$ C
- Hold Up Time* • 10 ms minimum at 110 VAC
- Overvoltage Protection* • 112-132% with auto recovery
- Overcurrent Protection* • 125-200% with auto recovery
- Short Circuit Protection* • Trip & restart with auto recovery
- Remote Sense* • Compensates for up to 0.5 V drop

#### General

- Efficiency* • 66% minimum for 5 V models  
75% minimum for all others
- MTBF* • 400,000 hrs min MIL-HDBK-217F
- Switching Frequency* • 42 kHz  $\pm 5$  kHz
- Isolation Voltage* • 4000 VAC Input to Output  
1500 VAC Input to Output  
500 VAC Output to Ground
- Size* • 5.0 x 3.0 x 1.2"  
127.00 x 76.20 x 30.48 mm
- Weight* • 330 g approx (PCB format)

#### Environmental

- Operating Temperature* • 0  $^{\circ}$ C to +70  $^{\circ}$ C  
Derate linearly from 100% load at +50  $^{\circ}$ C to 50% load at +70  $^{\circ}$ C
- Cooling* • Convection cooled
- Relative Humidity* • 5-95% non-condensing
- Storage Temperature* • -40  $^{\circ}$ C to +85  $^{\circ}$ C

#### EMC & Safety

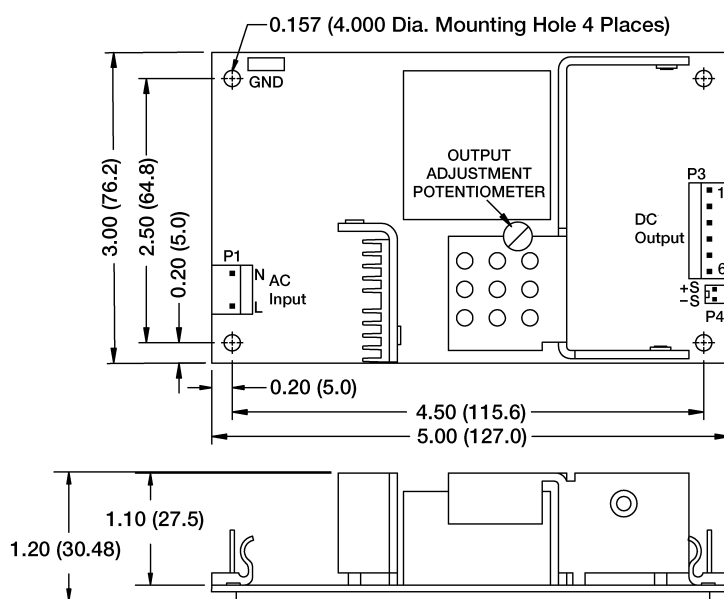
- Safety Approvals* • UL2601-1, CSA C22.2 No 601.1, EN60601-1 CE Mark (LVD)
- EMI/EMC* • EN55011 (CISPR11) Class B and FCC Part 18 Level B radiated & conducted
- ESD* • EN61000-4-2, Level 3 air, Level 2 contact, Perf Criteria A
- Radiated Immunity* • EN61000-4-3, 3 V/m, Perf Criteria A
- EFT/Burst* • EN61000-4-4, Level 3, Perf Criteria A
- Surge* • EN61000-4-5, Level 3, Perf Criteria A

OUTPUT VOLTAGE & CURRENT RATINGS				PBM65
Maximum Output Power	Output Voltage	Output Current	Total Regulation <sup>(1)</sup>	Model Number
51 W	5.1 VDC	10.0 A	3%	PBM65US05
65 W	12.0 VDC	5.5 A	2%	PBM65US12
65 W	15.0 VDC	4.4 A	2%	PBM65US15
65 W	18.0 VDC	3.7 A	2%	PBM65US18
65 W	24.0 VDC	2.8 A	2%	PBM65US24
65 W	28.0 VDC	2.4 A	2%	PBM65US28

## Notes

- Total regulation includes line and load regulation and set point accuracy.
- Ripple and noise measured with 20 MHz bandwidth with 10  $\mu$ F tantalum capacitor in parallel with a 0.1  $\mu$ F ceramic capacitor.

## Mechanical Details



P3 PIN CONNECTIONS	
Pin	Function
1	Output 1
2	Output 1
3	Output 1
4	Return
5	Return
6	Return

## NOTES:

- Dimensions shown in inches (mm).
- Tolerance 0.02 (0.5) maximum.
- Input connector mates with molex housing 09-50-3031 and Molex 2878 series crimp terminal.
- Output connector mates with molex housing 09-50-3061 and Molex 2878 series crimp terminal.
- P4 is for sense connector mates with molex housing 22-01-1023 and molex 40445 series crimp terminal.
- Loom kits with 300 mm wire available, order part number PBM65 LOOM.
- For mating connectors only, order part number PBM65 CONKNT.
- Covers available, order part number PBM65 COVER.
- Weight: 330 g (PCB format).