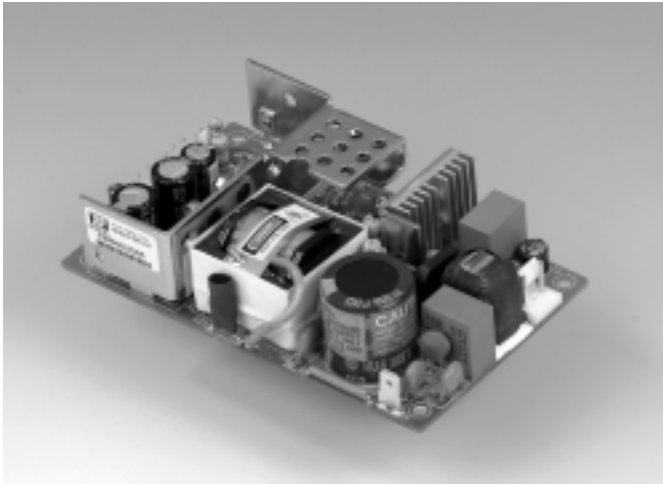


Medical Open Frame

65 Watts PBM65 Series



THE **XP**ERTS 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 μ A max at 115 VAC, 60 Hz 150 μ 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 μ s recovery time to within 1% for a 25% load change
Temperature Coefficient	• $\pm 0.04\%/^{\circ}\text{C}$
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 ± 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 $^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$ Derate linearly from 100% load at +50 $^{\circ}\text{C}$ to 50% load at +70 $^{\circ}\text{C}$
Cooling	• Convection cooled
Relative Humidity	• 5-95% non-condensing
Storage Temperature	• -40 $^{\circ}\text{C}$ to +85 $^{\circ}\text{C}$

EMC & Safety

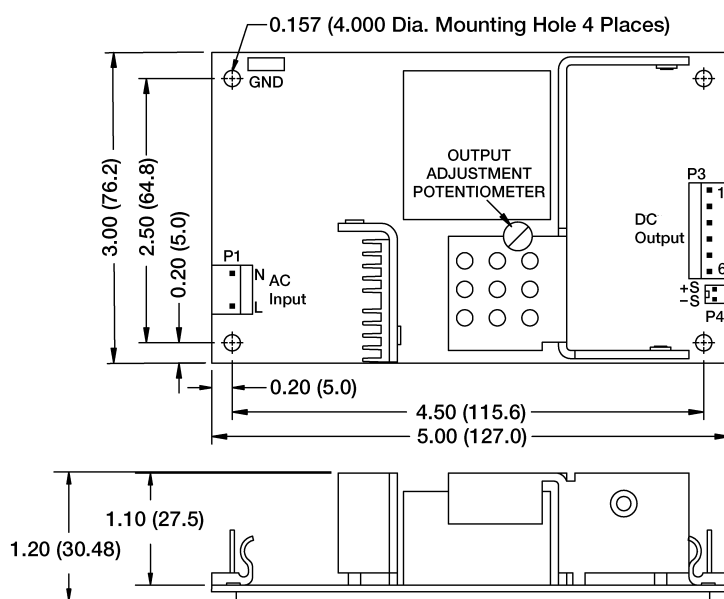
Safety Approvals	• UL2601-1, CSA C22.2 No 601.1, EN60601-1 CE Mark (LVD)
EMI/EMC	• EN55011 (CISPR11) Class B and FCC Part 18 Level B radiated & conducted
ESD	• EN61000-4-2, Level 3 air, Level 2 contact, Perf Criteria A
Radiated Immunity	• EN61000-4-3, 3 V/m, Perf Criteria A
EFT/Burst	• EN61000-4-4, Level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

OUTPUT VOLTAGE & CURRENT RATINGS**PBM 65**

Maximum Output Power	Output Voltage	Output Current	Total Regulation ⁽¹⁾	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

1. Total regulation includes line and load regulation and set point accuracy.
2. Ripple and noise measured with 20 MHz bandwidth with 10 μ F tantalum capacitor in parallel with a 0.1 μ 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:

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