

PR BX

POWERBOX **Medline 100**
OFM100 Series
100W
Single Output
AC/DC Medical Switch Mode Power Supply

Features

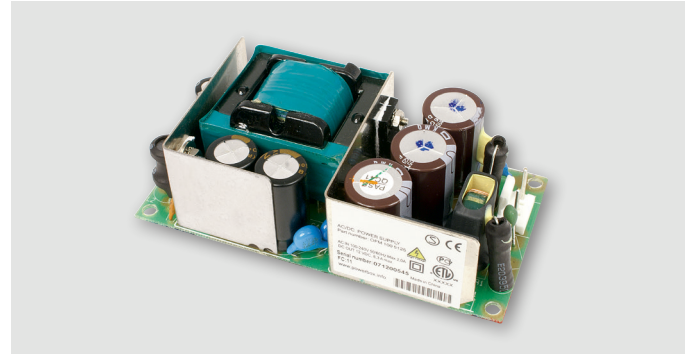
Ultra high power density 12.5W/sq inch
Reliable front edge fly-back design with very low component count
Standard 2x4 inch footprint
Very low leakage current allow parallel connection for higher output power requirements
Approved according to IEC/UL 60601-1
Superior EMC performance
Intelligent over temperature protection

Input

Nominal input range	100-240VAC.
Voltage range	90-264VAC
Frequency	47-63Hz.
Inrush current	Max 50A peak, cold start.
Input current	2A.
Input cable connector	Recommended: Housing: Molex 6442 series 3-pin housing part No 0026034030 (locking) or 002603 3031 (non-locking). Connector terminals: 0008520112 (reel) or 0008520113 (bag), tin plating.
Leakage current	<75µA.
Isolation class	Class I, double isolation between input and output.
Isolation	4000 VAC, 1s input to output. 4000 VAC, input to ground. 100 VDC, output to ground. 10Mohm isolation prim-sec.
Zero load power consumption	Approx 0,3 Watts at 110 VAC input.

Output

Power	Up to 100W, continuous at 100-240VAC input, see table.
Voltage	See table. Factory preset non adjustable.
Tolerance	5%.
Ripple and noise	Typ 1% p-p max (20MHz BW). 5% at ≤110VAC input.
Efficiency	87-90% @ 230VAC full load.
Hold up time	35ms at 230VAC.
Start up time	<2s max.
Line regulation	1% max full load. 5% at ≤100VAC input.
Load regulation	2% max @ 230VAC, 10-90% load change at output terminal.
Overcurrent protection	Approx 125%, auto recovery.



Current limiting charact.	Constant current.
Overtemp. protection	Yes, auto recovery and output power limiting.
Overvoltage protection	Yes.
Transient response	4ms max.
Temperature coefficient	Typ. 0.04%/°C of Uo.
Output connector	Recommended: Housing: Molex 6442 series 4-pin housing part No 0026034041 (locking) or 0026033041 (non-locking). Connector terminals: 0008520112 (reel) or 0008520113 (bag), tin plating.

Environmental

Operating temperature	0°C to 50°C (according to test method in IEC60601-1 and 0°C to 40°C acc to IEC60950-1).
Storage temperature	-40°C to +75°C.
Humidity	5% to 95% non-condensing.
Derating	Derate from 100% at 50°C linearly to 50% at +70°C. Derate to 80W output power at convection cooling. 12-15VDC versions derate to 70W at convection cooling.
Cooling	Convection or fan cooling. 6,6CFM (11m³/h) required for 100W continuous output. See drawing.
Environmental compliance	RoHS, REACH and WEEE.

General

Switching frequency	40-80kHz.
Acoustic noise	Less or equal to 30dB(A) at a distance of 0.3m and in frequency range 1Hz to 20kHz.
Dimensions	51 x 102 x 32 mm (2x4 inch).
Weight	Max 200g.
MTBF	270,000 hours at 25°C ambient temperature, 50 years power on.
Lifetime prediction	Min 80,000 hrs at 25°C, 230VAC at 70% load.
Warranty	2 years.
Installation guide	Available at Powerbox website.

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Standards

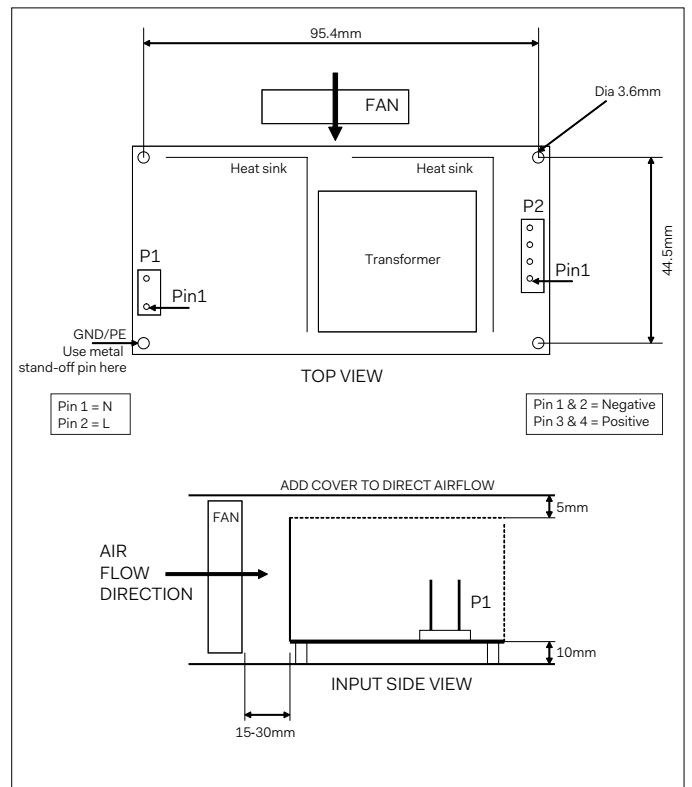
Safety standards	Approved according to IEC60601-1 Edition 3 including deviations for Europe, US & Canada by Intertek Semko. Fulfills IEC60950-1. UL pending.
Safety markings	S, ETL, UL & CE
EMC standards	IEC60601-1-2, IEC61204-3, EN55011 class B.
Harmonic current emissions	IEC61000-3-2.
Voltage fluctuations and flicker	IEC61000-3-3.
ESD susceptibility	IEC61000-4-2, ±6kV contact discharge, ±8kV air discharge.
Radiated susceptibility	IEC61000-4-3, 3V/m.
EFT/Burst	IEC61000-4-4, ±2kV on AC port, ±1kV on signal ports.
Surge	IEC61000-4-5, ±2kV common mode, ±1kV differential mode.
Conducted susceptibility	IEC61000-4-6, 3V/m.
Power frequency magnetic field	IEC61000-4-8, 3A/m.
Dips and interruptions	IEC61000-4-11, 30% 500ms, 60% 100ms, 95% 5sec. Performance criteria A A* B.

* at 100-160 VAC nominal input voltage performance criteria B

Powerbox Part No	Output Voltage	Continuous Output Current*)	Continuous Output Power*)
OFM1005125	12VDC	8.3A	100W
OFM1005126	15VDC	6.7A	100W
OFM1005127	18VDC	5.5A	100W
OFM1005128	24VDC	4.2A	100W

*) At 6,6 CFM forced air.

Air Flow Direction + Pin Assignment



Specifications are subject to change without notice.