

MWLT200 Series

New Product



Medical 200 Watt 3 x 5 Inch AC/DC Power Supplies

The MWLT200-Series of Medical Open Frame Power Supplies are ideal for dental and laboratory products and systems. Endoscopes, Instruments, pumps, drips, medical monitors, defibrillators, sleep apnea devices and many other uses.

The MWLT200 is available as a Class 1 OR Class 2 product, has 88% efficiency, remote sense, over temperature protection and auxiliary voltage options as standard.



Features :

- > 200 W with Forced Air Cooling.
- > Small 3x5x1.5 inch form factor.
- > High efficiency > 88%.
- > 12V Fan O/P
- > 5V Standby O/P
- > O/P Voltage Adjustability
- > Remote Sense

| Model Number | Description | Voltage/ Current | Voltage/ Current |
|----------------|-----------------------------|---------------------|---------------------|
| | | (Convection) | (Fan Cooled) |
| MWLT200-1000 | Class 1 with Screw Terminal | 5V @ 26A | 5V @ 35A |
| MWLT200-1000-2 | Class 2 with Screw Terminal | | 5V @ 26A |
| MWLT200-1300 | Class 1 with JST Connector | | |
| MWLT200-1300-2 | Class 2 with JST Connector | | |
| MWLT200-1001 | Class 1 with Screw Terminal | 12V @ 13.33A | 12V @ 16.67A |
| MWLT200-1001-2 | Class 2 with Screw Terminal | | |
| MWLT200-1301 | Class 1 with JST Connector | | |
| MWLT200-1301-2 | Class 2 with JST Connector | | |
| MWLT200-1002 | Class 1 with Screw Terminal | 15V @ 10.66A | 15V @ 13.33A |
| MWLT200-1002-2 | Class 2 with Screw Terminal | | |
| MWLT200-1302 | Class 1 with JST Connector | | |
| MWLT200-1302-2 | Class 2 with JST Connector | | |
| MWLT200-1003 | Class 1 with Screw Terminal | 24V @ 6.66A | 24V @ 8.33A |
| MWLT200-1003-2 | Class 2 with Screw Terminal | | |
| MWLT200-1303 | Class 1 with JST Connector | | |
| MWLT200-1303-2 | Class 2 with JST Connector | | |
| MWLT200-1004 | Class 1 with Screw Terminal | 48V @ 3.33A | 48V @ 4.17A |
| MWLT200-1004-2 | Class 2 with Screw Terminal | | |
| MWLT200-1304 | Class 1 with JST Connector | | |
| MWLT200-1304-2 | Class 2 with JST Connector | | |
| MWLT200-1005 | Class 1 with Screw Terminal | 30V @ 5.33A | 30V @ 6.67A |
| MWLT200-1005-2 | Class 2 with Screw Terminal | | |
| MWLT200-1305 | Class 1 with JST Connector | | |
| MWLT200-1305-2 | Class 2 with JST Connector | | |
| WLT200-CK | Metal cover-kit accessory | | |

OUTPUT SPECIFICATION

| | | |
|--------------------------------|--|-------------------|
| Output Power | | 200W max |
| Leakage Current | Typical Values | 150 to 220uA |
| Hold-Up Time | 115V/230V | 10ms |
| Peak Power | | 250W |
| Line Regulation | Low line to high line | ± 0.5% |
| Load Regulation | Min to Max load | ± 2% |
| Transient Response | 50% to full load Voltage Deviation Recovery Time | 10%, max <5 ms |
| OVP | 110 –150% of Main o/p Remote ON/OFF reset | Latch Type |
| Overload Protection | Primary limited | 150% of I-Out Max |
| Short Circuit Protection | Auto recovery <6s | Short Term |
| Ripple and Noise | Vstby & Main o/p | <2% |
| Output Rise Time | All outputs | <100ms |
| Minimum Load | Main o/p Standby o/p | 0.0A 0.05A |
| Power Fail Signal | TTL signal goes low | 1ms warning |
| Power Good Signal | TTL signal goes High after V1 is in regulation | 0.1s to 0.5s |
| Remote Sense | Line Compensation | 200mV |
| Remote on/off | To turn-on PSU, Short Remote pin to GND | Yes |
| Over temperature Protection | Auto recovery | Yes |
| Output Adjustability | @ 160W | ± 3% |
| Set point accuracy | Main o/p | Pre-set at ± 1% |

INPUT SPECIFICATION

| | | |
|----------------------|-----------------------|---|
| AC Input DC Input | Universal | 90 to 264VAC 120 to 390VDC (Reduce to half load at 120VDC Input) |
| Efficiency | 5V Other Models | ≥ 83% ≥ 86% |
| Input Frequency | | 47-63 Hz |
| Input Current | Full Load at Low line | 3.0Arms , max |
| Inrush Current | 230VAC , cold start | 65A, max |

All EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.eospower.com. EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.



MWLT200 Series

Medical 200W Forced Air Cooled AC/DC Power Supplies



| ENVIRONMENTAL SPECIFICATION | | |
|-----------------------------|--|--|
| Operating Temperature | -20 to 0° C start-up guaranteed For Convection cooled application, Derate output power to 40% of max. from For Forced air cooled application, Derate output power to 50% of max from | -20 to 70° C 41 to 70° C 51 to 70° C |
| Storage Temperature | | -40 to 85° C |
| Cooling | Convection @ 40° C (5V model) 300LFM Airflow @ 50° C (5V model) | 160W (130W) 200W (175W) |
| Relative humidity | Non condensing | 95%, max |
| MTBF | Bellcore TR332 | > 250,000 hrs Minimum |
| Altitude | | Operating: 10,000ft Non-Operating: 40,000ft |
| Vibration | Operating & Non Operating | 5-9Hz, 2G PK, 0.5 oct./min, 2 cycles; 9-500Hz 0.5 oct./min, 2 cycles. |
| Transients | | EN61000-4-2, 4-4, 4-5, Level 3 |

| INPUT CONNECTOR J1 | |
|--------------------|------------|
| Pin 1 | AC Neutral |
| Pin2 | AC Line |

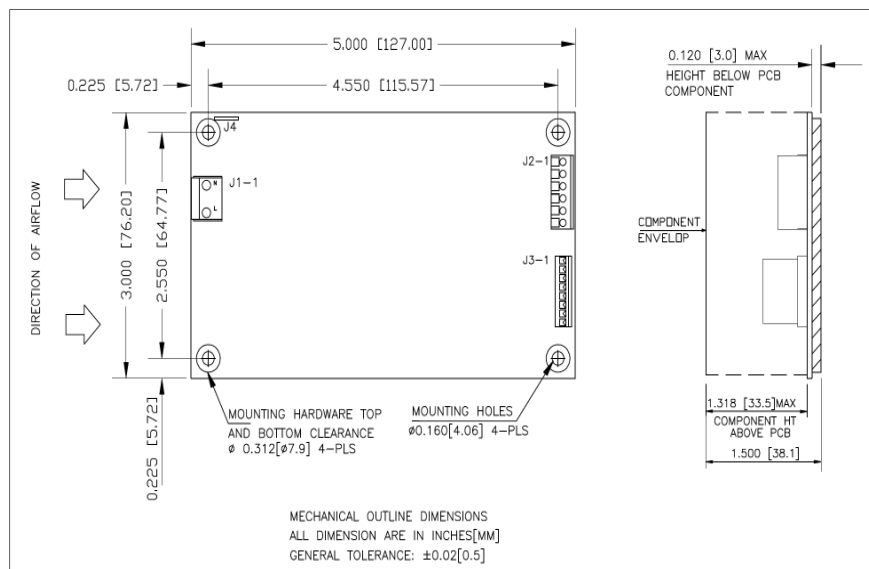
| OUTPUT CONNECTOR J2 | |
|---------------------|-----|
| Pin 1,2,3 | RTN |
| Pin 4,5,6 | V1 |

| Earth J4 |
|------------------|
| Quick Disconnect |

| SIGNAL CONNECTOR J3 | |
|---------------------|---------------------|
| Pin 1 | +ve Remote Sense |
| Pin 2 | Vfan (12V/0.5A) |
| Pin 3 | -ve Remote Sense |
| Pin 4 | Remote On/Off |
| Pin 5 | Vstby (5V/1A, ± 5%) |
| Pin 6 | RTN |
| Pin 7 | Power Fail |
| Pin 8 | Power Good |

| EMC AND SAFETY SPECIFICATIONS | |
|-------------------------------|---|
| CE Mark | Complies with the LVD |
| EMC | EN5022-B, CISPR22-B, FCC Part 15 Class B, EN60601-1-2 |
| Agency Approval | UL, c-UL, IEC, EN |
| Harmonic Correction | EN61000-3-2 Class D |
| Safety Standard | EN60601 |
| Safety file number | Under approval |
| Isolation | 5.9KVDC Input to Output 2.6KVDC Input to GND |
| Insulation Resistance | 7mOhms Input to Output |

| MECHANICAL SPECIFICATION | |
|--|---|
| AC Input Connector J1 | Molex 3 position, 0.156 center 26-60-4030 (Center Pin removed) Mating Connector: Molex 09-50-3031 Pins: 08-50-0106 |
| Ground Connector | Molex 19705-4301 PCB Quick Disconnect Mating: Molex 190030001 |
| DC Output Connector J2 (Screw type terminal) | Tyco, 2 x 3 Pin terminal block, 2-1776112-3 , 3.96mm pitch Mating: Side entry wire 13AWG |
| DC Output Connector J2 (Header Connector) | CONN.HDR, 6 PIN, 0.156", PCB mount, JST p/n: B6P-VH-B-C' (LF)(SN) Mating part no: Housing MPN: VHR-6M, Housing, 6 pin, 0.156" Pitch Crimp/CONTACT PIN MPN: SVH-41T-P1.1 |
| Signal Connector J3 | Molex 8 Position, 0.1" Center, 22-23-2081 Vertical Mating: Molex, 22-01-2087, Pins: 08-50-0113 |
| Size | 3 x 5 x 1.5 Inches |
| Weight | 325gms |



All EOS power supplies have UL, CSA and Nemko safety compliance and medical versions meet UL60601-1 standards. All our products are RoHs compliant. Visit us at www.eospower.com. EOS brand power supplies and patents are owned exclusively by EOS Power. All Rights Reserved.

