

MWLT100 Series

100W single output Medical AC/DC Power Supplies

The MWLT100 Series of single output convection cooled products are one of the smallest and most efficient 100-watt power supply packages available in the industry today typically 1/3rd the size and 20% more efficient than leading competitors. Packing nearly 12 watts per cubic inch the MWLT100 Series features Universal AC inputs from 90v to 264v, measures a mere 2 inches x 4 inches x 1.07 inches, and has a rated efficiency of greater than 86%. It is configured in all popular single output voltages and its flexible design allows for simple modification to alternate voltages as required.

The MWLT100 Series meets all medical EMC and safety specifications, and has a reliability rating of over 200,000 hours mean time between failure. The MWLT100 Series is produced with the traditional EOS red color heat sink signifying its medical market application.

Medical product applications for the MWLT100 family include: medical, dental and lab equipment and systems such as endoscopes, instruments, pumps, drips, blood and fluid analyzers, video systems, defibrillators, sleep apnea, nurse call stations and many other uses.



Features :

- > 100 W air cooled rating.
- > Small 2x4x1 inch form factor.
- > High efficiency > 86%.
- > Single outputs.
- > Low conducted and radiated noise.
- > Medically Approved
- > Class 1 Product
- > Active PFC

| Model Number | Output | Voltage / Current * | Voltage Set Point | Min. Load |
|-----------------------------------|--------|---------------------|-------------------|-----------|
| MWLT100-1001 | V1 | 12V@8.3A | 12V | 0. 1A |
| MWLT100-1002 | V1 | 15V@6.67A | 15V | 0. 1A |
| MWLT100-1003 | V1 | 24V@4.17A | 24V | 0. 1A |
| MWLT100-1004 | V1 | 48V@2.08A | 48V | 0. 1A |
| VLT60CK Metal cover kit accessory | | | | |

| INPUT SPECIFICATION | | |
|---------------------|------------------------|--|
| AC Input | Universal | 90 to 264VAC |
| DC Input | | 120 to 390VDC (Reduce to half load at 120VDC Input) |
| Efficiency | All Models | ≥86% |
| Input Frequency | | 47-63 Hz |
| Input Current | Full Load at High line | 1.5Arms , max |
| Inrush Current | High Line , cold start | 60A, max |

| OUTPUT SPECIFICATION | | |
|----------------------------|--|-------------------|
| Output Power | | 100W max |
| Leakage Current | Typical Values | 170 to 220uA |
| Hold-Up Time | 115V/230V | 6ms./15ms |
| Voltage Set Point Accuracy | V1 | ±2% |
| Line Regulation | Low line to high line | 0.3% |
| Load Regulation | Min to Max load | 0.5% |
| Transient Response | 50% to full load Voltage Deviation Recovery Time | 10%, max <5 ms |
| OVP | Self Protecting | Auto Recovery |
| Overload Protection | Primary limited | 110% to 130% |
| Short Circuit Protection | Auto recovery <6s | Short Term |
| Ripple and Noise | All Output Volatges | <1% |
| Output Rise Time | All outputs | <100ms |

* Maximum current per output channel. Do not exceed total output power rating

All Red Rocket, Inc. 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.redrocketpower.com and contact us at: sales@redrocketpower.com or by calling +1 805-409-0909 today.

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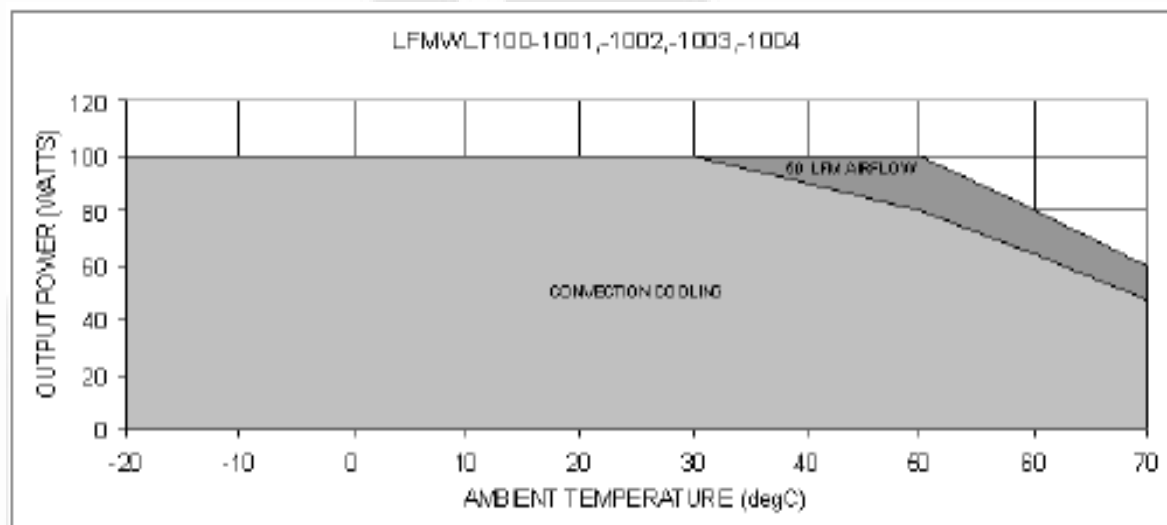
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| EMC AND SAFETY SPECIFICATIONS | |
|-------------------------------|---|
| CE Mark | Complies with the LVD |
| EMC | EN5022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1 |
| Agency Approval | VDE , UL, c-UL |
| Safety Standard | EN60601-1-2 |
| Safety file number | UL: EI73812 |
| Isolation | 4KVAC Input to Output 1500VAC Input to GND |
| Insulation Resistance | 7mOhms Input to Output |

| ENVIRONMENTAL SPECIFICATION | | |
|-----------------------------|---|--|
| Operating Temperature | Convection 50LFM Airflow Refer to de-rating | -20 to 30° C -20 to 50° C To 70° C |
| Storage Temperature | | -40 to 85° CC |
| Cooling | | Convection 50LFM Airflow |
| Relative humidity | Non condensing | 95%, max |
| MTBF | MIL - HDBK-217F | > 200,000 hrs |
| 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, 4-3, 4-4, 4-5, 4-6, 4-11 Level 3 |



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| MECHANICAL SPECIFICATION | |
|--------------------------|--|
| AC Input Connector J1 | Molex 3 position, 0.156 center Mating Connector: Molex 09-50-3031 Pins: 08-50-0106 |
| Ground Connector | Molex 19705-4301 PCB Quick Disconnect Mating: Molex AA-1140 |
| DC Output connector J2 | Molex 4 position, 0.156 center Mating Connector: Molex 09-50-8041 Pins: 08-52-0072 |
| Size | 4"x2"x1.07" |
| Weight | 5oz (150g) |

| OUTPUT CONNECTOR J2 | |
|---------------------|---------------|
| | Single Output |
| Pin1 | RTN |
| Pin2 | RTN |
| Pin3 | V1 |
| Pin4 | V1 |

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

| INPUT SPADE CONNECTOR | |
|-----------------------|-----------|
| GND | AC Ground |

