

Key Features & Benefits:

- Built-In Active PFC function
- High Efficiency
- Waterproof (IP67)
- Constant Current / 0-10V Dimming
- Clock Dimming(CLK) / PWM Dimming
- Protection: OVP, SCP, OTP
- UL Type TL, Type HL



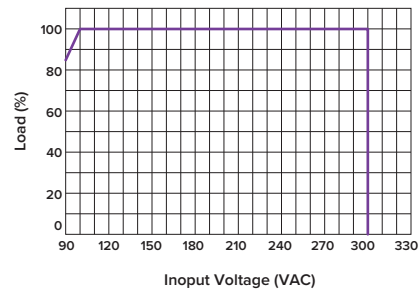
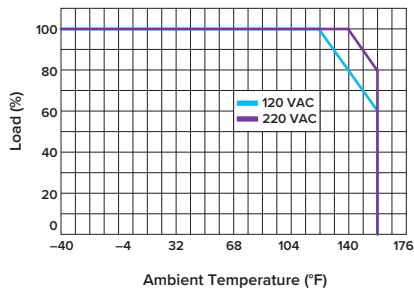
Project: _____ Catalog#: _____ Date: _____
Notes: _____



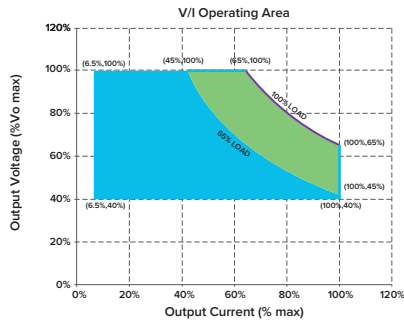
| ESL-DMG-100W-OPMA-XX-YYYY* | | 800 [†] | 1050 [†] | 1500 [†] | 2100 [†] | 3200 | 4800 [†] |
|-----------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-----------|-------------------|
| Input | Efficiency (120 VAC) | 89.0% | 89.5% | 88.0% | 87.0% | 90.0% | 85.0% |
| | Efficiency (230 VAC) | 91.0% | 89.0% | 90.0% | 89.0% | 89.0% | 87.0% |
| | Voltage Range (VAC) | 90 - 305 | | | | | |
| | Rated Input Voltage (VAC) | 100 - 277 | | | | | |
| | Frequency Range (Hz) | 47 ~ 63 | | | | | |
| | Power Factor | >0.97 at 115 VAC, >0.90 at 277 VAC at full load | | | | | |
| | THD | <15% with 80% - 100% load, at 100 - 277 VAC; <20% with 50% - 100% load, at 100 - 277 VAC | | | | | |
| | AC Current (Typ.) | 1.35A Max. at 110 VAC | | | | | |
| | Inrush Current (Typ.) | 65A at 230 VAC Input 77°F Cold Start (Time wide=500uS, measured at 50% Ipeak, Not applicable for the inrush current to noise filter for less than 0.2ms) | | | | | |
| | Leakage Current (Max.) | 1.35A Max. at 110 VAC | | | | | |
| Output | Rated Output Voltage (V) | 189-125 | 48-24 | 100-66 | 71-47 | 50-31 | 33-21 |
| | Output Voltage Range (V) <small>Note.1</small> | 189-75 | 58-24 | 100-40 | 71-29 | 50-20 | 33-13 |
| | Rated Current (mA) | 530-800 | 1050 | 1000-1500 | 1400-2100 | 2000-3200 | 3000-4800 |
| | Output Current Range (mA) | 53-800 | 70-1050 | 100-1500 | 140-2100 | 200-3200 | 300-4800 |
| | Rated Power (W) | 100W (max) | | | | | |
| | Output Current Set Range | 6.5%Io_max - 100%Io_max | | | | | |
| | Constant Power Output Set Range | 65%Io_max - 100%Io_max | | | | | |
| | Ripple Current (PK / AV) / AV | 10% max. (peak-to-average value) at 100% Iout | | | | | |
| | Current Tolerance <small>Note.2</small> | ±5% | | | | | |
| | Line Regulation | ±1% | | | | | |
| | Load Regulation | ±3% | | | | | |
| | Setup, Rise Time | 0.5s (Typ.) measured at 230 VAC Input | | | | | |
| | Hold Up Time | 10ms at 230 VAC 100% load | | | | | |
| Dimming Control | 12 VDC Output Voltage (VDC) | 10.8V Min. / 12V Typ. / 13.2V Max. | | | | | |
| | 12 VDC Output Current (VDC) | 0mA~20mA max. | | | | | |
| | 0~10V / DMI+ Voltage | Absolute maximum voltage - 10V min ~ 20V max | | | | | |
| | 0~10V / DMI+ Short Current | 280uA ~ 450uA (DIM(+)=0) | | | | | |
| | DIMMING FUNCTION | 1~10V/10%Io~100%Io ref. Dimming module diagram and dimming cruve | | | | | |
| Protection | Over Voltage (V) | 250 | 60 | 130 | 100 | 70 | 43 |
| | Short Circuit | Hiccup mode. The power supply shall be self-recovery when the fault is removed. | | | | | |
| | Over Temperature | Protection type: Resumable mode. When the inside temperature of PSU rise to 212°F (Typ.), decreases output current returning to normal after over temperature is removed. | | | | | |
| Environment | Operating Temperature | -40~+158°F (Refer to "Derating Curve") | | | | | |
| | Tcase | 190.4°F Max | | | | | |
| | Operating Humidity | 20~95%RH, non-condensing | | | | | |
| | Storage Temperature (Humidity) | -40~+185°F, 10-95%RH | | | | | |
| | Temperature Coefficient | 0.03%/°F (32 - 122°F) | | | | | |
| Vibration | 10~500Hz, 5G 12min/cycle, period for 72 min. each along X, Y, Z axes | | | | | | |
| Safety & EMC | Safety Standard | UL8750 and EN61347-2-13 | | | | | |
| | Withstand Voltage | I/P-O/P:3.75KVAC I/P-FG:1.875KV O/P-FG:1.5KV | | | | | |
| | Isolation Resistance | I/P-O/P ,I/P-FG,O/P-FG:100M Ohms/500VDC/77°F/70%RH | | | | | |
| | EMC Emission | Comply with FCC Part15 Class A | | | | | |
| EMC Immunity | Comply with FCC Part15 Class A | | | | | | |
| Others | MTBF | 500,000 hours, measured at full load, 40°F ambient temperature | | | | | |
| | Lifetime | >=100 KHrs lifetime (continous) at Tcase = 149 / >=50 KHrs lifetime (continous) at Tcase = 167°F | | | | | |
| | Dimension (LxWxH) | 7.2" L x 2.66" W x 1.46" H | | | | | |
| | Weight | 1.87lbs | | | | | |
| * XX = Output Voltage / YYYY = Output Current | | Note 1: refer to V/I curve / Note 2: At rated current, includes set up tolerance, line regulation and load regulation. | | | | | |

† These products are not stocked. Contact factory for lead times.

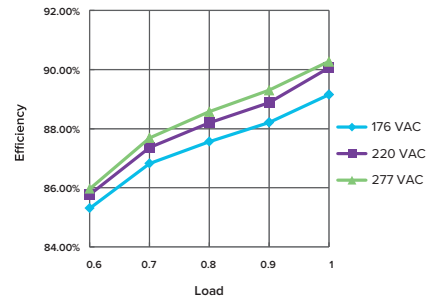
Derating Curve:



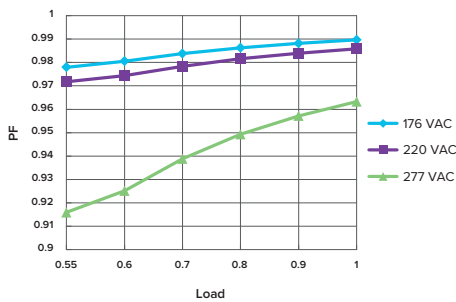
V/I Curve:



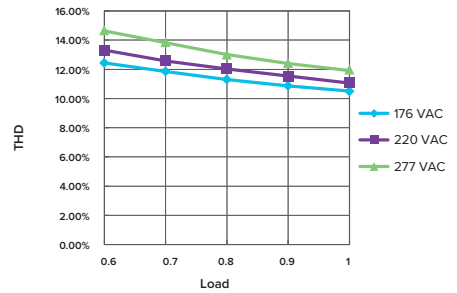
Efficiency vs. Load Curve:



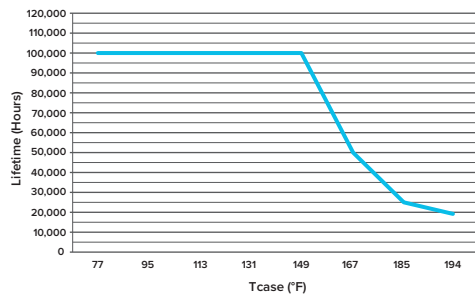
Power Factor vs. Load Curve:



THD Curve:



Life Time vs. Tcase (Ref.):



Dimensions:

