

## **LED-100W Series- Fixed Output and Dimmable**

**Switch Mode LED Drivers Constant Current & Constant Voltage with Isolation** Black Magic Thermal Advantage™ Aluminum Housing

#### **Electrical Specifications**

Input Voltage Range: 100-277 Vac Nom. (90-305 V Min/Max)

Can endure 320Vac for 48 Hrs, 350Vac for 2 Hrs Input Over-Voltage:

50/60 Hz Nom. (47-63 Hz Min/Max) Frequency: Power Factor: >0.90 @ full load, 100V through 277V Inrush Current: <30.0 Amps max @ 230 Vac, cold start 25°C

1.30 Amps max Input Current:

**Maximum Power:** 

**Current Accuracy:** ± 1% Over input line variation

Load Regulation:

THD: ≤ 20% @ full load Leakage Current: 400 µA Typical Hold Up Time: **Half Cycle** 

Protection: Output Over-Voltage, Output Over-Current, and

Output Short Circuit Protection reset by power cycling

### **Electrical Specifications**

Minimum Starting Temp: Maximum Case Temp.

-40°C to +85°C Storage Temperature: **Humidity:** 5% to 95% Cooling: Convection

Vibration Frequency: 5 to 55 Hz/2g, 30 minutes

Sound Rating:

MTBF: 418,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2

FCC 47CFR Part 15 Class B compliant EMC:



Total Power: 100 Watts

• Input Voltage: 100-277 Vac Nom. • UL Dry & Damp Location Rated

IP66

· High Power Factor

 UL8750, CSA 22.2, EN61347, EN61000-3-2, EN61000-3-3 Class C

Constant Current - Product Specifications					
Model Number	Output Current (mA ±3%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency	
LED100W-286-C0350-XX	350	95-286	100	92%	
LED100W-222-C0450-XX	450	74-222	100	92%	
LED100W-143-C0700-XX	700	47-143	100	91%	
LED100W-095-C1050-XX	1050	31-95	100	91%	
LED100W-071-C1400-XX	1400	23-71	100	91%	
LED100W-057-C1750-XX	1750	19-57	100	90%	
LED100W-048-C2100-XX	2100	16-48	100	90%	
LED100W-041-C2450-XX	2450	13-41	100	90%	
LED100W-036-C2800-XX	2800	12-36	100	90%	
LED100W-032-C3150-XX	3150	10-32	100	90%	
LED100W-028-C3570-XX	3570	9-28	100	89%	
LED100W-024-C4200-XX	4200	8-24	100	89%	
LED100W-020-C5000-XX	5000	7-20	100	88%	
LED100W-018-C5550-XX	5550	6-18	100	88%	

-XX indicates dimming options are available. See options at left. Blank = fixed current output

#### **Ordering Options:**

- 0-10V & Resistance dimmable version comes with an extra two wires +Purple/-Gray on the output side. -D 0-10V Dimming is compatible with most quality 0-10V wall dimmers. See page 3 for additional specifications.
- -PD: PWM Dimmable version comes with an extra two wires +Purple/-Gray on the output side. PD PWM version is PWM Dimmable via a positive 10% to 100% Duty Cycle, 200Hz to 1KHz, 0-10V Pulse. See page 4 for additional specifications.



LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

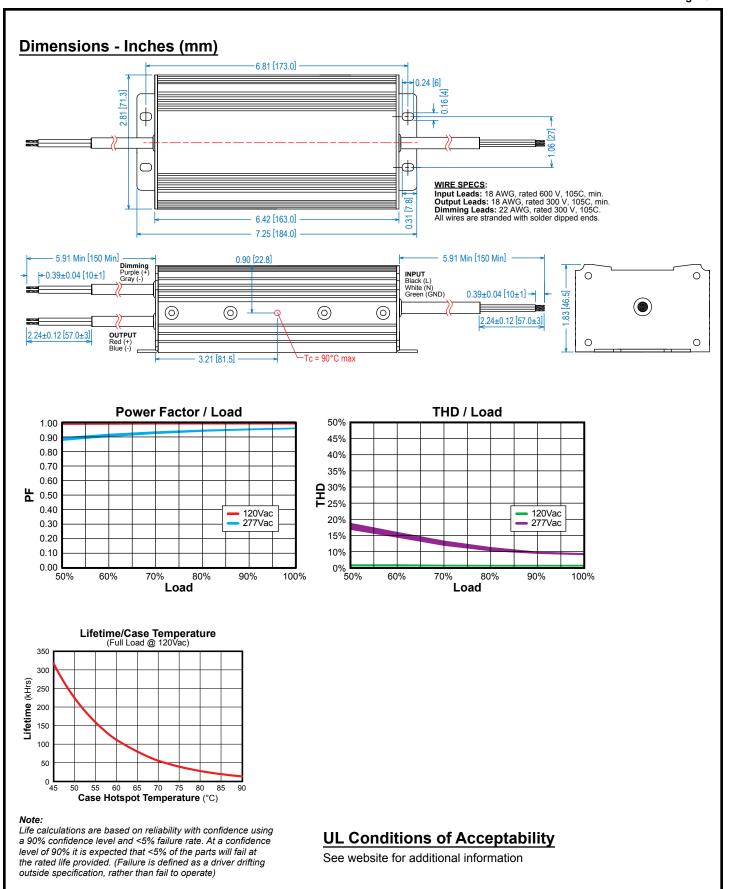
Specifications subject to change without notice.

Constant Voltage - Product Specifications					
Model Number	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency	
LED100W-018	18	1388-5550	100	88%	
LED100W-020	20	1250-5000	100	88%	
LED100W-024	24	1050-4200	100	89%	
LED100W-028	28	893-3570	100	89%	
LED100W-032	32	788-3150	100	90%	
LED100W-036	36	700-2800	100	90%	
LED100W-041	41	613-2450	100	90%	
LED100W-048	48	525-2100	100	90%	
LED100W-057	57	438-1750	100	90%	
LED100W-071	71	350-1400	100	91%	
LED100W-095	95	263-1050	100	91%	
LED100W-143	143	175-700	100	91%	
LED100W-222	222	113-450	100	92%	
LED100W-286	286	88-350	100	92%	

Rev 8-31-15



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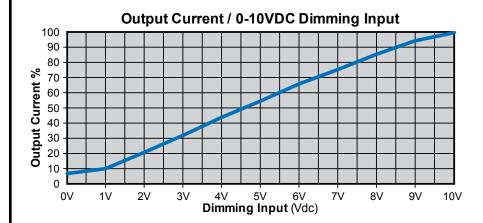
# "-D" Option: 0-10VDC and Resistance Dimming

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	_	2 mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0 V	_	+15 V

### **Typical Dimming Circuit**



(Dimmer must be current-sink type control)



#### Notes:

- 1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
- 2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
- 3. 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V
- 4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.

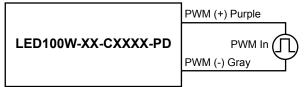


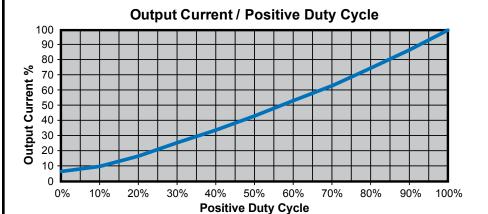


## "-PD" Option: PWM Dimming

Parameters	Minimum	Typical	Maximum
Absolute Maximum Voltage Range on PWM Input (Purple Wire)	-2.0V	10V	+28V
Input LOW Level Voltage Range (Purple Wire)	-2.0	0V	+7.5V
Input HIGH Level Voltage Range (Purple Wire)	+9.0	10V	28V
Sink Current into PWM Input (Purple Wire)	0mA	1	1.2mA
PWM Input Signal Frequency	200Hz	_	1000Hz
PWM Input Signal Positive Duty Cycle	0%	10-90%	100%

#### **PWM Positive Dimming Typical Circuit**





- 1. PWM Dimmable version comes with an extra 2 wires +Purple/-Gray on the output side.
- Below 10% Duty cycle proper dimming operation is not assured. Unit is not intended to turn off at <10% Duty Cycle.</li>
  PWM dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.