

LED-50W Series

Fixed Output and Dimmable Switch Mode LED Drivers



Electrical Specifications Input Voltage Range: 100-277 Vac Nom. (90-305 V Min/Max) Can endure 320Vac for 48 Hrs, 350Vac for Input Over-Voltage: 50/60 Hz Nom. (47-63 Hz Min/Max) Frequency: Power Factor: >0.90 @ full load, 100V through 277V Inrush Current: <20.0 Amps max @ 230 Vac, cold start 25°C Input Current: 0.50 Amps max Maximum Power: 50W ±1% Over input line variation **Current Accuracy:** Load Regulation: ±3% THD: ≤ 20% @ Full Load Leakage Current: 400 μA Typical Hold Up Time: Half Cycle **Protections** Over-Voltage, Over-Current Over-voltage **Short Circuit Auto Recovery Environmental Specifications** 90°C (3330mA and 15V, 88°C) (4200mA and 12V, 78°C) Maximum Case Temp.

	Total	Power:	50	Watts
•	IOtai	I OVVCI.	20	vvatts

• Input Voltage: 100-277 Vac Nom.

1g/s

-30°C

-40°C to +85°C

5 to 55 Hz/2g, 30 minutes

474,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2

FCC 47CFR Part 15 Class B compliant

5% to 95% Convection

- UL Dry & Damp Location Rated
- IP66

Minimum Starting Temp:

Storage Temperature:

Vibration Frequency:
Sound Rating:
Impact Resistance:

Humidity:

Cooling:

MTBF:

EMC:

- High Power Factor
- Constant Current & Constant Voltage with Isolation
- Black Magic Thermal Advantage™ Plastic Housing
- UI 8750
- UL Sign Components Manual (S.A.M. Models)

Safety Cert.	Standard
UL/CUL	UL8750
CSA	22.2
CE	EN61347
EMC Standard	Notes
EN55015	·
EN61000-3-2	> 80% Rated Power
EN61000-3-3	Class C
FCC, 47CFR Part 15	Class B
EN6100-4-5	2KV L-N, 8/20 μsec Surge Protection





Constant Current Models

Model	Output Current (mA ±3%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED50W-142-C0350-XX	350	47-142	49.7	89%
LED50W-111-C0450-XX	450	37-111	49.9	89%
LED50W-072-C0530-XX	530	24-72	38.1	88%
LED50W-072-C0700-XX	700	24-72	50	88%
LED50W-060-C0830-XX	830	20-60	49.8	88%
LED50W-048-C1050-XX	1050	16-48	50	88%
LED50W-042-C1190-XX	1190	14-42	50	87%
LED50W-040-C1250-XX	1250	13-40	50	87%
LED50W-036-C1400-XX	1400	12-36	50	87%
LED50W-029-C1750-XX	1750	9-29	50	87%
LED50W-024-C2100-XX	2100	8-24	50	87%
LED50W-020-C2500-XX	2500	7-20	50	87%
LED50W-018-C2800-XX	2800	6-18	50	86%
LED50W-015-C3330-XX	3330	5-15	49.9	85%
LED50W-012-C4200-XX	4200	4-12	50	84%

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

Constant Voltage Models

Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED50W-012 •	12	1050-4200	50	84%
LED50W-015	15	833-3330	49.9	85%
LED50W-018	18	700-2800	50	86%
LED50W-020	20	625-2500	50	87%
LED50W-024 •	24	525-2100	50	87%
LED50W-029	29	438-1750	50	87%
LED50W-036	36	350-1400	50	87%
LED50W-040	40	313-1250	50	87%
LED50W-042	42	298-1190	50	87%
LED50W-048	48	263-1050	50	88%
LED50W-060	60	208-830	49.8	88%
LED50W-072	72	175-700	50	88%
LED50W-111	111	113-450	49.9	89%
LED50W-142	142	88-350	49.7	89%

• Indicates S.A.M.

Class 2: US/Canada

Ordering Options:

 ⁻D: 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.

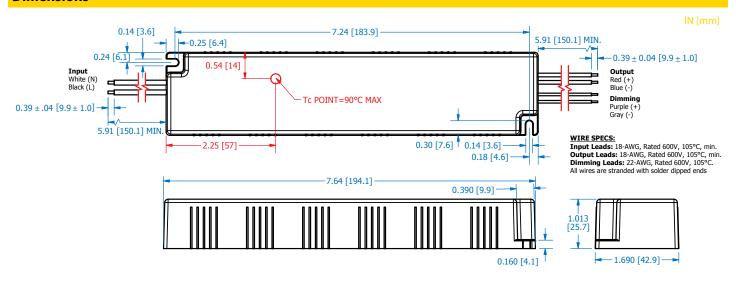


LED-50W Series

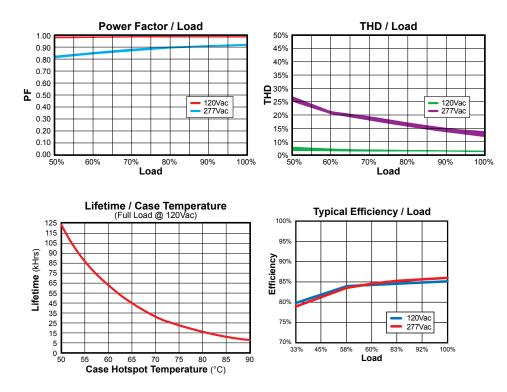


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Dimensions



Power Characteristics



UL Conditions of Acceptability

See website for additional information

Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.



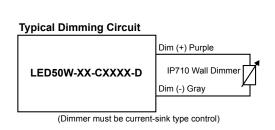
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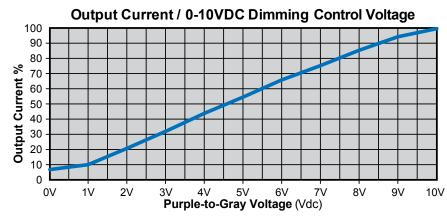


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"-D" Option: 0-10VDC and Resistance Dimming

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





Notes:

- 1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
- $2. \ \ \, \text{Compatible with most 0-10V dimmers. Recommended dimmer is Leviton IP710 or equivalent}$
- 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.