

30W LED用電源(定電流、定電圧) 30W Series



- Drive Mode: Constant Current or Constant Voltage
- Technology: PFC Off-Line Switch Mode
- Output Power: 30W Max.
- Input Voltage: 90 to 305VAC, 47-63Hz
- Number of Outputs: One
- Output Voltages: 4VDC - 85VDC
- Output Currents: 350mA - 2500mA
- Optional 0-10V or PWM Positive Dimming 10% ~ 100%

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Environmental

1. Operating temperature: Tc 90C Maximum. Reference -30 to +60°C ambient
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF@ 40°C: 484,000 hours @ Full Load per MIL-217F Notice 2.

Safety and Compliance

1. UL8750, EN61347, CSA 22.2 safety compliant
2. FCC, 47CFR Part 15 Class B compliant
3. Water resistant and Dust Proof Design: IP66, NEMA4, for Dry, Damp, Wet Locations.
4. Compact, Lightweight Design.
5. Safety Isolation between Primary and Secondary
6. Meets EN61000-3-2 & EN61000-3-3 Class C
7. Protection: output over-voltage, output over-current, output short circuit, auto-recovery.
8. Transient protection built in.

Electrical Specifications at 25°C

- Input voltage range: 90 to 305VAC
- Frequency: 47- 63HZ
- Power Factor: ≥ 0.90 at $\geq 60\%$ Load, 120Vac/230Vac, $\geq 88\%$ Load 277Vac
- THD%: $\leq 20\%$ at $\geq 60\%$ Load, 120Vac/230Vac/277Vac, $\geq 80\%$ Load 277Vac
- Inrush current: $<15A$ at 25C, 230V, cold start, Max. Load
- Input current: 0.32A at 120Vac, 60Hz, Maximum Load
- Efficiency: 85% typical at 230Vac Full Load
- Constant Current regulation: $\pm 3\%$ Over Input Line Variation
- Load regulation accuracy: $\pm 4\%$
- Leakage current: 400uA typical; Hold up time: half cycle



Constant Current Versions

Part Number ⁽²⁾	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
30W-85-C0350	NO	NO	28 - 85 VDC	350 mA	$\pm 3\%$	30W	86%
30W-75-C0400	NO	NO	25 - 75 VDC	400 mA	$\pm 3\%$	30W	86%
30W-66-C0450	NO	NO	22 - 66 VDC	450 mA	$\pm 3\%$	30W	85%
30W-54-C0560	YES	NO	18 - 54 VDC	560 mA	$\pm 3\%$	30W	85%
30W-42-C0700	YES	NO	14 - 42 VDC	700 mA	$\pm 3\%$	30W	85%
30W-36-C0830	YES	YES	12 - 36 VDC	830 mA	$\pm 3\%$	30W	84%
30W-24-C1250	YES	YES	8 - 24 VDC	1250 mA	$\pm 3\%$	30W	84%
30W-18-C1660	YES	YES	6 - 18 VDC	1660 mA	$\pm 3\%$	30W	83%
30W-12-C2500	YES	YES	4 - 12 VDC	2500 mA	$\pm 3\%$	30W	83%

Notes

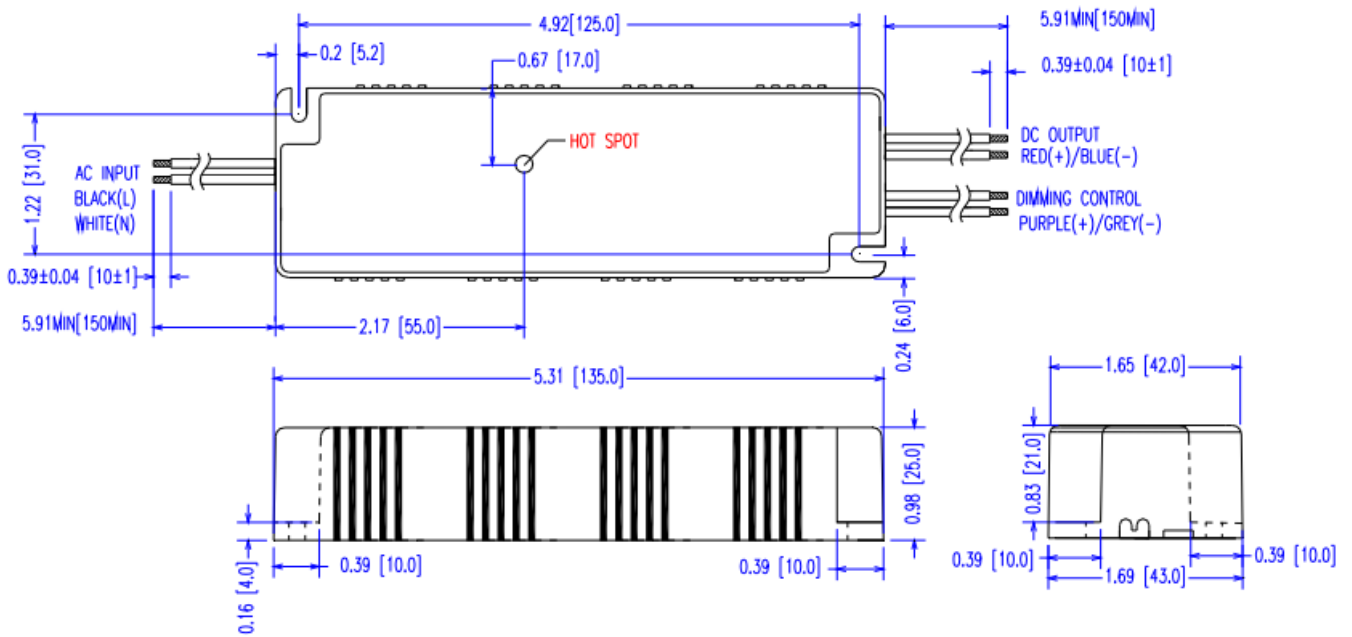
1. Typical efficiency measured at 230VAC input, full load
2. For dimmable versions add appropriate designator to the end of the part number: For Example: LD30W-18-C1660-RD is 0-10V or resistance dimmable version, LD30W-18-C1660-PD is PWM dimmable version.
 -RD 0-10V & Resistance dimmable version comes with an extra two wires +Purple/-Grey on the output side.
 -PD PWM Dimmable version comes with an extra two wires +Purple/-Grey on the output side.
3. -RD 0-10V Dimming is compatible with most quality 0-10V wall dimmers and direct 0-10V analog signal. See page 3 for details.
4. -PD PWM version is PWM Dimmable via a positive 10% to 100% Duty Cycle, 500Hz to 1.5KHz, 0-10V Pulse. See page 4 for details.

Constant Voltage Versions

Part Number	US Class 2	CN Class 2	Output Voltage	Output Current Range	Voltage Accuracy	Output Power Maximum	Typical Efficiency ⁽¹⁾
30W-85	NO	NO	85 VDC	88 - 350 mA	± 5%	30W	86%
30W-75	NO	NO	75 VDC	100 - 400 mA	± 5%	30W	86%
30W-66	NO	NO	66 VDC	113 - 450 mA	± 5%	30W	85%
30W-54	YES	NO	54 VDC	140 - 560 mA	± 5%	30W	85%
30W-42	YES	NO	42 VDC	175 - 700 mA	± 5%	30W	85%
30W-36	YES	YES	36 VDC	208 - 830 mA	± 5%	30W	84%
30W-24	YES	YES	24 VDC	313 - 1250 mA	± 5%	30W	84%
30W-18	YES	YES	18 VDC	415 - 1660 mA	± 5%	30W	83%
30W-12	YES	YES	12 VDC	625 - 2500 mA	± 5%	30W	83%

Mechanical Dimensions: Inches [mm]

Material: Black PC ABS Plastic Case
 Fully Encapsulated
 Weight: 233 grams (8.2 oz) Typical



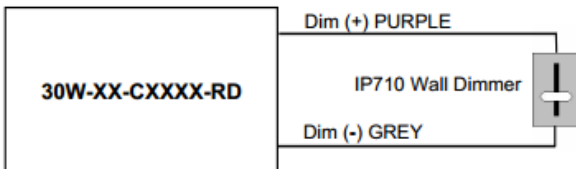
-RD 2-Wire 0-10V CCR Dimming Scheme

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0mA	—	2mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0V	—	+15V
Sink Current into 0-10V Purple Wire	0mA	—	1.2mA

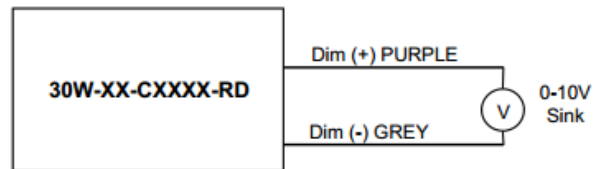
Notes

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

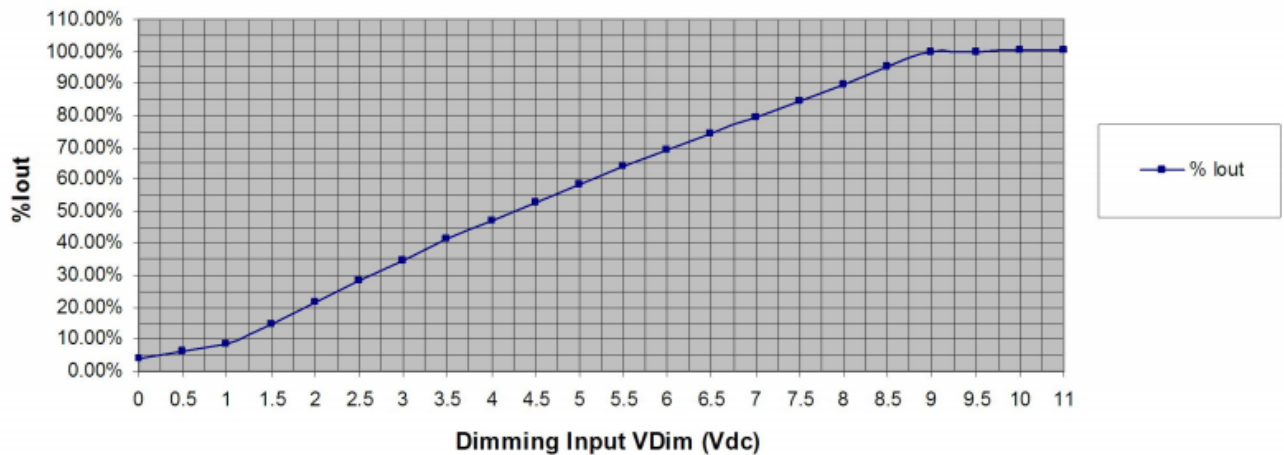
-RD 2-Wire Resistance Dimming Scheme



-RD 2-Wire 0-10V Analog Dimming Scheme



% Output Current vs. 0-10VDC Dimming Input



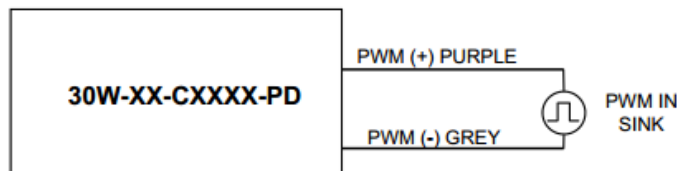
-PD 2-Wire CCR PWM Positive Dimming Scheme

Parameters	Minimum	Typical	Maximum
Absolute Maximum Voltage Range on PWM Input (Purple Wire)	-2.0V	10V	+15V
Input LOW Level Voltage Range (Purple Wire)	-2.0V	0V	+5.5V
Input HIGH Level Voltage Range (Purple Wire)	+9.0V	10V	+15V
Current into PWM Input (Purple Wire)	0mA	—	1.2mA
Source Current out of PWM Input (Purple Wire)	0mA	—	2mA
PWM Input Signal Frequency	500Hz	—	1500Hz
PWM Input Signal Positive Duty Cycle	0%	10-90%	100%

Notes

1. -PD PWM Dimmable version comes with an extra 2 wires +Purple/-Grey on the output side.
2. -PD PWM Dimmable version is not intended to dim below about 5% @ 0% Duty Cycle or 10% @ 10% Duty Cycle
3. -PD PWM dimmable version output will be 100% with Purple/Grey open and minimum with Purple/Grey Shorted.

-PD 2-Wire PWM Positive Dimming Scheme



% Output Current vs. 1.0 kHz, Positive Duty Cycle Dimming Input

