# LDS70 Series

## LED Lighting Power Supply - Class 2

**Total Power:** 70 Watts
**# of Outputs:** Single

## Special Features

- Constant Current & Constant Voltage operation
- Dimming options
- Free-Air rated - No forced air necessary for cooling

## Compliance

- Class 2 Outputs
- IP64 to IP67 Water Protection
- CISPR 15 / FCC Part 15 EMI Performance
- Class C Harmonics
- < 1.0 W No-load power
- > 0.9 Power Factor

## Safety

- **EN**    61347-2-13
- **UL**    1310 / 8750
- **CSA**   C22.2 No. 107.1
- **CE**    Mark (LVD)

## Warranty

Standard 5-Year Warranty (Consult Factory for Extended Terms)

RoHS
2002/95/EC

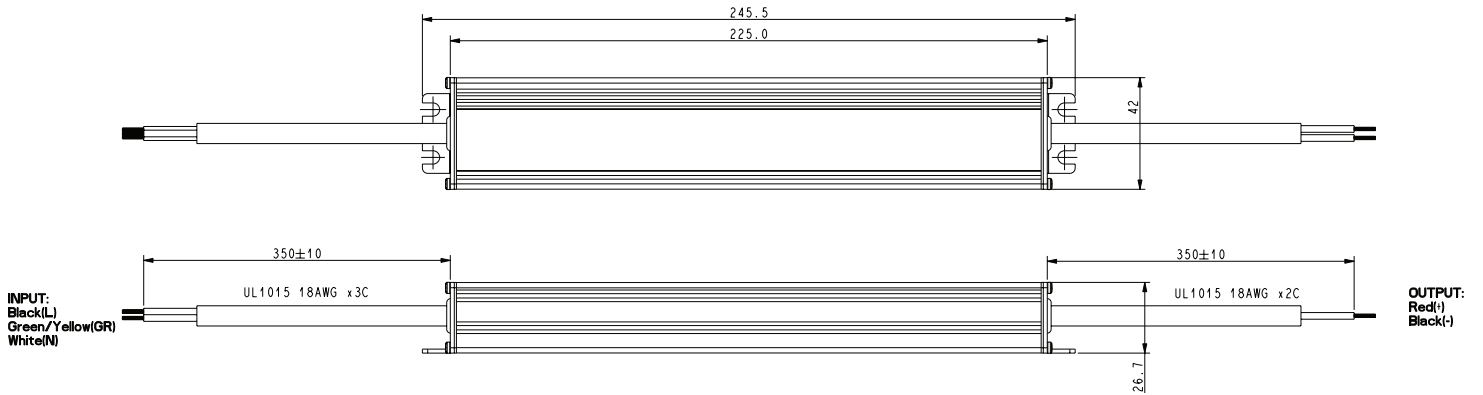# Electrical Specifications

| Input | |
|---|---|
| Input range nom: | 100 - 240 Vac (U models); 120-277 Vac (H models) |
| Input range (max): | 90-264 Vac (U models); 90-305 Vac (H models); Derating may apply |
| Input frequency: | 47 - 63 Hz |
| Inrush current: | < 50 A max., cold start @ 25 °C |
| Leakage current: | 750 µA, at 264 Vac 50/60 Hz |
| Input power (no-load): | < 1.0 W, at no load |
| Input power (max): | < 82 W, at full load |
| Input fusing: | Internally fused |
| EMI/RFI: | CISPR 15 FCC Part 15 |
| Efficiency (typical): | 88% - 230 Vac 87% - 115 Vac |

| Output | |
|---|---|
| Constant current: | Programmable current levels. Refer to model table for details |
| Constant voltage: | No load to Full load operation. Refer to model table for details |
| Output power: | 70 W maximum (60 W for 12 V). Class 2 rated outputs |
| Ripple voltage: | < 2% |

| Control and Protection | |
|---|---|
| Current limit: | Programmable. Refer to model table for details |
| Protection: | Short Circuit Overvoltage Overtemperature |

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# Environmental Specifications

| Criteria | Specification | Reference |
|---|---|---|
| Power Factor | > 0.9 | Energy Star |
| Harmonics | Class C | IEC 61000-3-2 |
| THD - Input Current | < 20% | ANSI C82.11 |
| Surge Immunity | Level 3<br>6 kV ring wave | IEC 61000-4-5<br>ANSI C62.41 |
| EMC Compliance | | IEC 61000-4-2, -3, -4, -5, -6, -8, -11 |
| Temperature (case) | -40 °C to 90 °C | Operating |
| Ingress Protection | IP64 through IP67 | Refer to model table for details |

## Mechanical Drawing



INPUT:
Black(L)
Green/Yellow(GR)
White(N)

OUTPUT:
Red(+)
Black(-)

245.5
225.0
42
350±10
UL1015 18AWG x3C
350±10
UL1015 18AWG x2C
26.7

## Mechanical Miscellaneous

| Criteria | Specification | Reference |
|---|---|---|
| Input Wiring | 300 mm | 3-wire |
| Output Wiring | 300 mm | 4-wire |
| Weight | 370 grams | |

## Ordering Information

| Model Number | Rated Output Voltage | Rated Output Current | Current Adjust | Dimming Interface | IP Rating | Status |
|---|---|---|---|---|---|---|
| LDS70-12-U00 | 12 Vdc | 5.0 Adc | | None | IP67 | Released |
| LDS70-12-H03 | 12 Vdc | 5.0 Adc | | 1 - 10 V | IP67 | Released |
| LDS70-58-U00 | 58 Vdc | 1.2 Adc | | None | IP67 | Released |
| LDS70-58-U01 | 58 Vdc | 1.2 Adc | DIP Switch | 2-level | IP64 | Released |
| LDS70-58-H03 | 58 Vdc | 1.2 Adc | | 1 - 10 V | IP67 | Released |
| LDS70-58-H04 | 58Vdc | 1.2Adc | | Programmable[1] | IP67 | Coming Soon |

Notes:
[1]The Dimming Interface on these highly-flexible models can be programmed via a Graphical User-Interface. The options include 0-10V, 1-10V and Bi-Level dimming. Maximum and minimum current levels and threshold levels are also programmable.
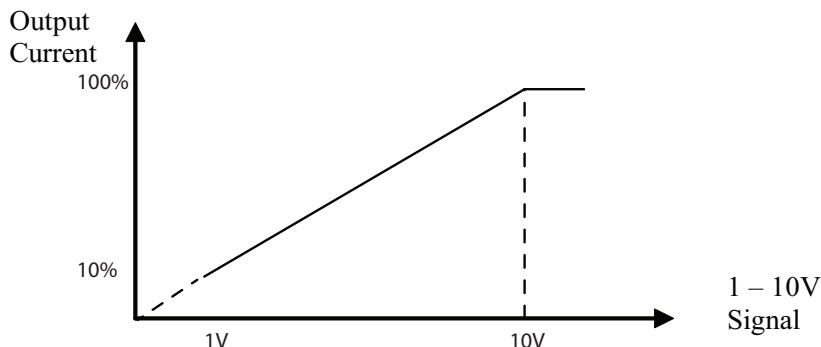
# Current Adjust and Dimming Description

## DIP Switch (for model -U01 only)

| Switch 1 | Switch 2 | -12 Model | -58 Model |
|---|---|---|---|
| ON | ON | 5.00 Adc | 1.2 Adc |
| OFF | ON | 3.75 Adc | 0.9 Adc |
| ON | OFF | 2.50 Adc | 0.6 Adc |
| OFF | OFF | 1.25 Adc | 0.3 Adc |

## 2 Level - External Switch between Purple & Grey Wires (for model -U01 only)

| Switch | Open Current |
|---|---|
| CLOSED | At Programmed Level |
| OPEN | At 20% of Rated Level |

## 0 - 10 V Between Purple & Grey Wires (for models -H03 only)

Output Current

100%

10%

1V        10V

$1 - 10V$ Signal

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