



**49W LED Driver with 4 Channel Constant Current Outputs
PDA050W LED Power Supply with 0-10V Dimming**



Features

- 0-10V Dimming
- High Reliability
- Over-Voltage, Short & Open Circuit, and Over Temperature Protection
- Constant Current Output
- High Efficiency
- Class 2 Output per UL1310
- AC input: 108-304VAC
- Brownout/Brownout Recovery
- UL8750 Compliant
- Limited Power Source
- IP65 Rated for Indoor/Outdoor Use
- Power Factor Correction
- 4 Channel Output

Applications

- Indoor Lighting
- Linear Fluorescent Replacement
- Outdoor Lighting

Safety Approvals

- cUL/UL

Mechanical Characteristics

- Length: 242mm (9.5in)
- Width: 43.5mm (1.7in)
- Height: 30.5mm (1.2in)
- Weight: 675g (1.5lbs)

Output Specifications

Channel 1~4

Model	DC Output Voltage Range			Output Current Range		
	Min.	Typ.	Max.	Min.	Typ.	Max.
PDA050W-450G	22V	24.5V	26.5V	430mA	453mA	476mA

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INPUT:

AC Input Voltage
108 to 304V AC

Nominal AC Input Voltage
120~277VAC

Leakage Current
<3.5mA at 227VAC – Case to Ground
<0.25mA at 227VAC – Outputs to Ground

Maximum Input Current
0.55A (RMS) at 108VAC, 60Hz

AC Inrush Current
<30A at 277VAC, 60Hz

OUTPUT:

Total Output Power
Maximum output should be <52W

Efficiency
>82% at 120VAC, >84% at 277VAC

Standby Power
<2.5W maximum

Power Factor
≥0.9 at nominal input voltage, full load

Ripple (CH1~CH4)
240mA p-p

Turn on/off Time
0.5 seconds maximum at nominal AC input

ENVIRONMENTAL:

Operating Temperature 0 to +50°C
Storage Temperature -40 to +85°C

Operating Humidity 10 to 95%
Storage Humidity 5 to 95%

Case Temperature
Case may not exceed 70°C at ambient 50°C

Dimming

Dimming	Min.	Typ.	Max.	Remarks
Dim Voltage-1	-	-	1V	Cut off Current at 1.V Dim. Voltage
Dim Voltage-2	-	-	1.2V	Output Current ≤14mA
Dim Voltage-3	-	5.5V	-	Driver shall provide 95mA ± 10% Current
Dim Voltage-4	-	-	10V	Driver 10V shall provide 100% Output (453mA ± 5%)
Sink Current	-	-	1mA	
100% brightness without dimmer: Open state for dimming port				

EMC

FCC 47 Part 15 Class A

Immunity

EN61000-4-2 Criteria B
EN61000-4-3
EN61000-4-4
EN61000-4-5 Criteria B
EN61000-4-6
EN61000-4-8
EN61000-4-11
EN61000-3-2 Class C

Isolation Test

Primary to Secondary: 3000VAC, <5mA, 1 minute

Insulation Resistance

Primary to Secondary: 500VDC, >5M ohm, 1 minute

FEATURES:

Input Over Current Protection

The input power line will be fused with a 2A/300V fuse resistor

Short Circuit Protection

Auto restart without damage

Output Overvoltage Protection

Output should not exceed 39V, auto shut down

Open Circuit Protection

Once the circuit is opened, the output voltage should be less than 39V at nominal AC input conditions

Wires

Input	Gauge	Length
Black (live)	UL1316 AWG18	453±10mm
White (neutral)	UL1316 AWG18	453±10mm

Ground

Green/Yellow (GND)	UL1316 AWG18	220±10mm
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Output

Red (LED CH1~4+)	UL1569 AWG22	76.2±10mm
Black (GND CH1~4-)	UL1569 AWG22	76.2±10mm

Dimming

Violet (Dimmer +)	UL1316 AWG18	127±10mm
Gray (Dimmer-)	UL1316 AWG18	127±10mm

Output Connector

Molex 8 pin p/n – 09-50-1081 mate p/n – 09-66-2088

Ingression Protection

IP65

Lifetime

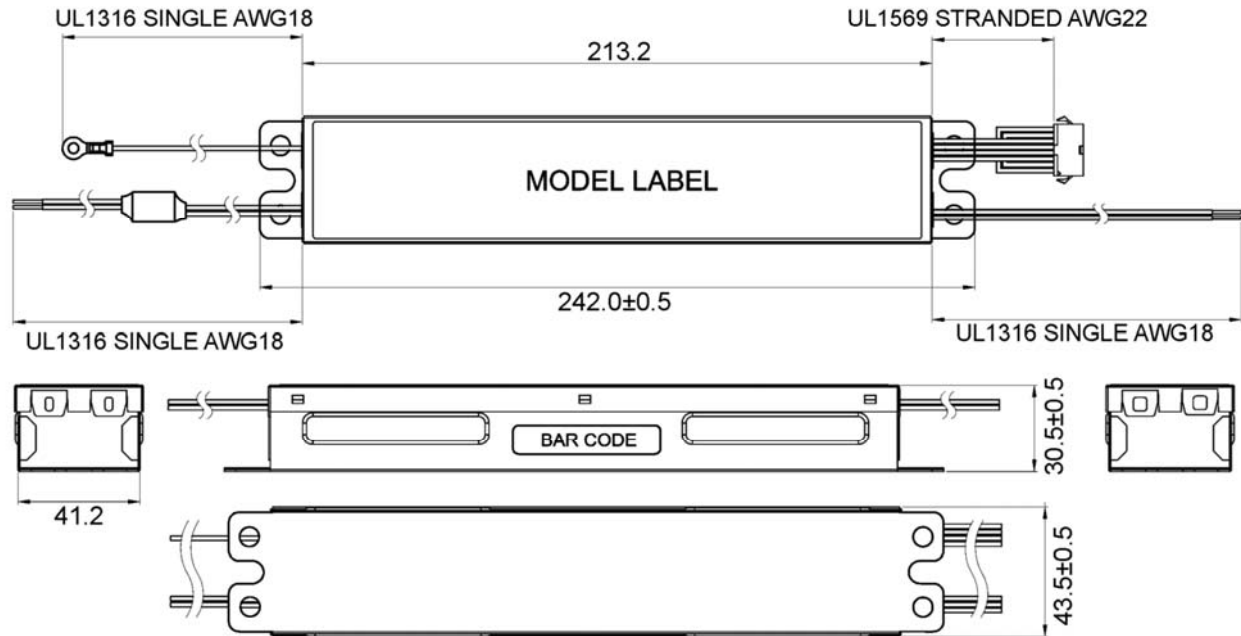
50K Hours minimum at max load and ambient 50°C

Mounting Provision

Screw mounting, accessible without opening unit

Warranty

5 Years



Output Connection:

Pin Number	Connection
Pin 1	V+
Pin 2	GND
Pin 3	GND
Pin 4	V+
Pin 5	V+
Pin 6	GND
Pin 7	GND
Pin 8	V+