



BP-RAM60U1500-09-51

Wireless Dual Channel 60W Tunable Driver



Product Overview

BP-RAM60UI500-09-51 is a dual channel constant current LED Bluetooth smart power supply with adjustable output current. It provides excellent lighting performance, which can not only achieve basic functions such as automatic control on/off, brightness, and color temperature control through APP settings, but also link sensors, smart speakers, curtain controllers, smart switches, and cloud platforms to obtain more and richer intelligent experiences. And after installation and deployment, device firmware can be updated wirelessly (OTA) for a more brand new experience.

The ecosystem is listed by the **Design Lights Consortium (DLC)**, qualifying it for energy conservation incentive programs and rebates by utility companies.

Specifications

Electrical

| Specifications | Minimum | Typical | Maximum |
|--|---------|----------|---------|
| Rated Input Voltage(VAC) | 120 | | 277 |
| Frequency Range(HZ) | 47 | 50/60 | 63 |
| Input AC Current(A) (@120VAC) | | | 0.64 |
| PWM Dim Duty%(1K~10KHZ) | 0 | | 100% |
| VADJ (V) | 0 | | 10 |
| Output Current (mA) CW | | 1500 ±5% | |
| Output Voltage (V) | 30 | | 40 |
| Adjustable Output Power (W)CW | 22.5 | | 60 |
| Auxiliary Voltage (V) | 10.8 | 12 | 13.2 |
| Max. Load ability of Vaux. (mA)output>10% full load | | | 120 |

Features

- Independent output channels to control intensity and correlated color temperature (CCT)
- BLE 5.0 based non-flooding intelligent communication
- Auxiliary 12VDC output to power the sensors
- Configurable output current
- High efficiency >85% and low THD <15%
- Short circuit overload and open load protection
- Low ripple and noisy, flicker free
- Power factor greater than 0.9
- Zero downtime Over-the-Air (OTA) firmware updates

Performance

| Specifications | Minimum | Typical | Maximum |
|--|---------|---------|---------|
| Power Factor (Min. with full load) | 0.9 | | |
| THDI (Max. with full load) | | | 20% |
| Start-up delay (s) | | | 0.75 |
| Efficiency (with recommend typ. load) | | 87% | |
| Output Ripple Current(≤1KHZ) | | | 5% |
| Line Regulation | | 3% | 5% |
| Load Regulation | | 3% | 5% |
| Inrush Current(old-start)(A) | | | 50 |
| Life Time(hrs) | | 50000 | |
| Case Temperature | | | 90 |
| Warranty(years) | | 5 | |

Dimming

| Specifications | Value |
|----------------|---------|
| Dimming Range | 0%~100% |

EMC & Safety

| Specifications | Value |
|--|--|
| Conducted Emission and Radiated Emission | FCC Part 15 Class A |
| PFC and Harmonic current emission | IEC61000-3-2 |
| Voltage fluctuation & flicker | IEC61000-4-11 |
| Electrostatic Discharge Immunity | IEC-61000-4-2 |
| Surge Immunity | EN61547 LN1kV, LN-G 2kV, IEEE C.62.41-1991, ring wave, 2.5kV level |

Mechanical

| Specifications | Value |
|------------------|---------------------------------------|
| Dimension(LxWxH) | 8.5 x 1.31 x 1.1in(216 x 33.3 x 28mm) |

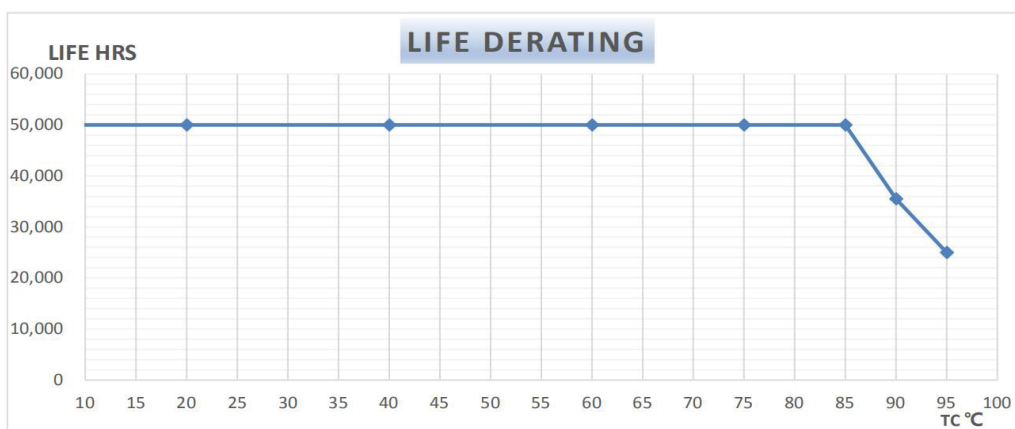
Protection

| Specifications | Details | Remark |
|---------------------|---------------------|--|
| Open Circuit | Latch/ Auto Release | Restart recovery |
| Short Circuit | Hiccup mode | Recovery after open Circuit |
| Input Over Voltage | Latch/ Auto Release | Adjust to the right input range after recove |
| Input Under Voltage | Latch/ Auto Release | Adjust to the right input range after recove |
| Fuse protection | Unrecoverable | Fusing during OCP |
| Over Temperature | Current adaptive | Restart recovery |

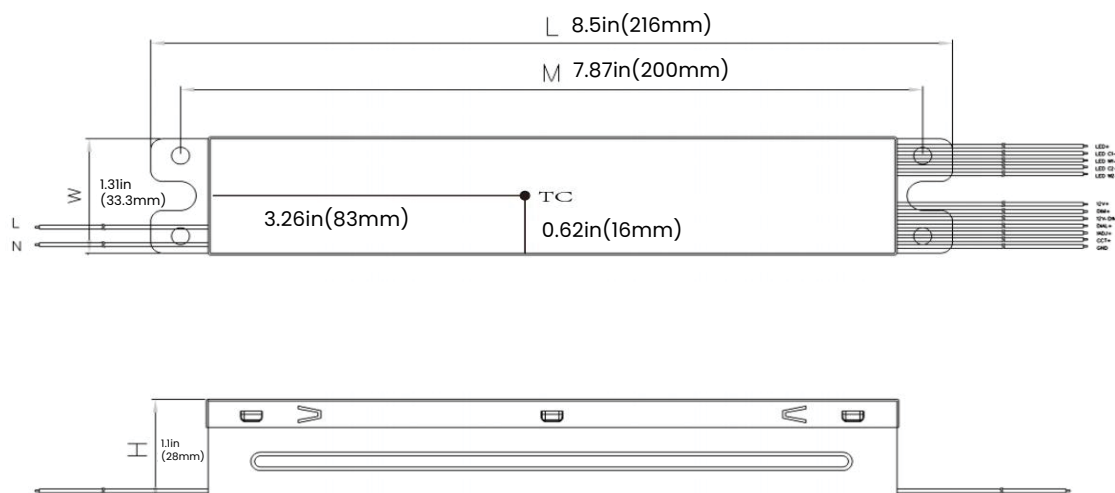
Environment

| Specifications | Value |
|-------------------------------|---------------------------|
| Storage Ambient temperature | -20°C~+80°C |
| Storage Humidity | 10 ~ 85% RH |
| Operating Ambient temperature | -20°C~+55°C |
| Operating Humidity | 10 ~ 90% RH |
| Application | For Dry and Damp location |

Life Time Curve



Product Dimensions



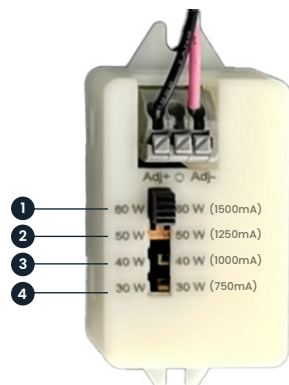
Wire Description



| Name | Color | Details |
|--------|--------|--|
| AC L | Black | 18AWG 105°C 600V length, 150mm wire stripping 10mm |
| AC N | White | 18AWG 105°C 600V length, 150mm wire stripping 10mm |
| LED+ | Red | 20AWG 105°C 300V length, 300mm wire stripping 10mm |
| LED C- | Grey | 20AWG 105°C 300V length, 300mm wire stripping 10mm |
| LED W- | Blue | 20AWG 105°C 300V length, 300mm wire stripping 10mm |
| ADJ+ | Black | 20AWG 105°C 300V length, 260mm wire stripping 10mm |
| ADJ- | Pink | 20AWG 105°C 300V length, 260mm wire stripping 10mm |
| 12V+ | Yellow | 20AWG 105°C 300V length, 300mm wire stripping 10mm |
| 12V- | Brown | 20AWG 105°C 300V length, 300mm wire stripping 10mm |

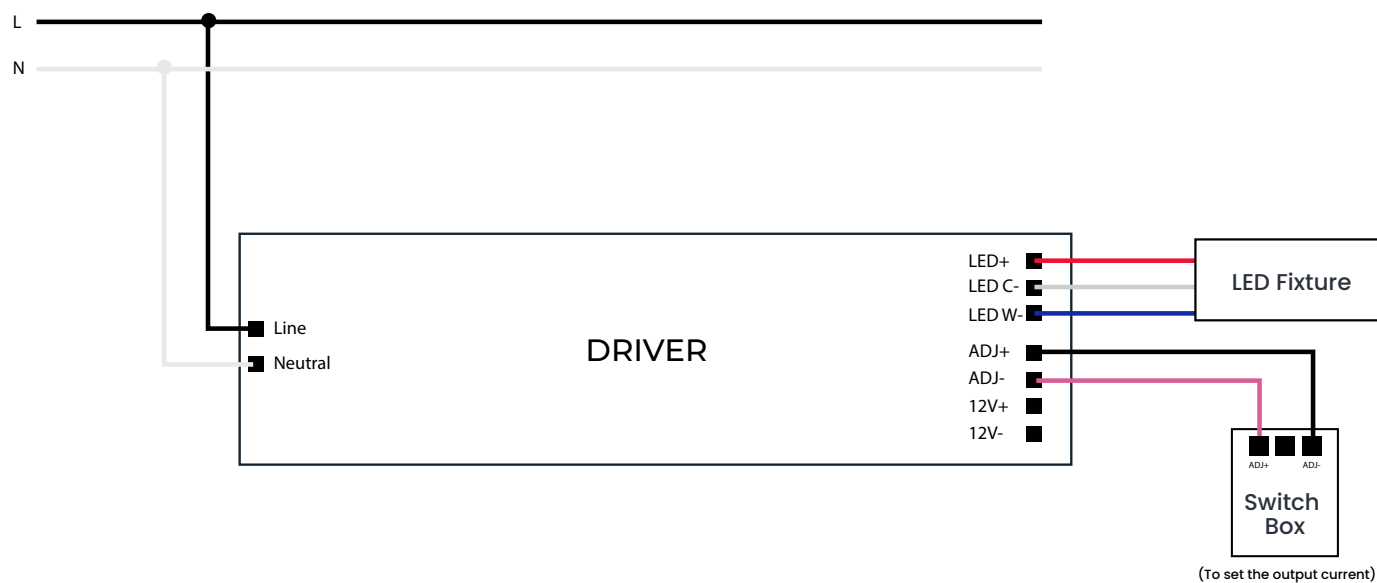
Setting the output current (Optional)

Output current of the driver can be set from 750mA to 1500mA. For this, driver to be wired with an external switch box via ADJ+, ADJ- wires.

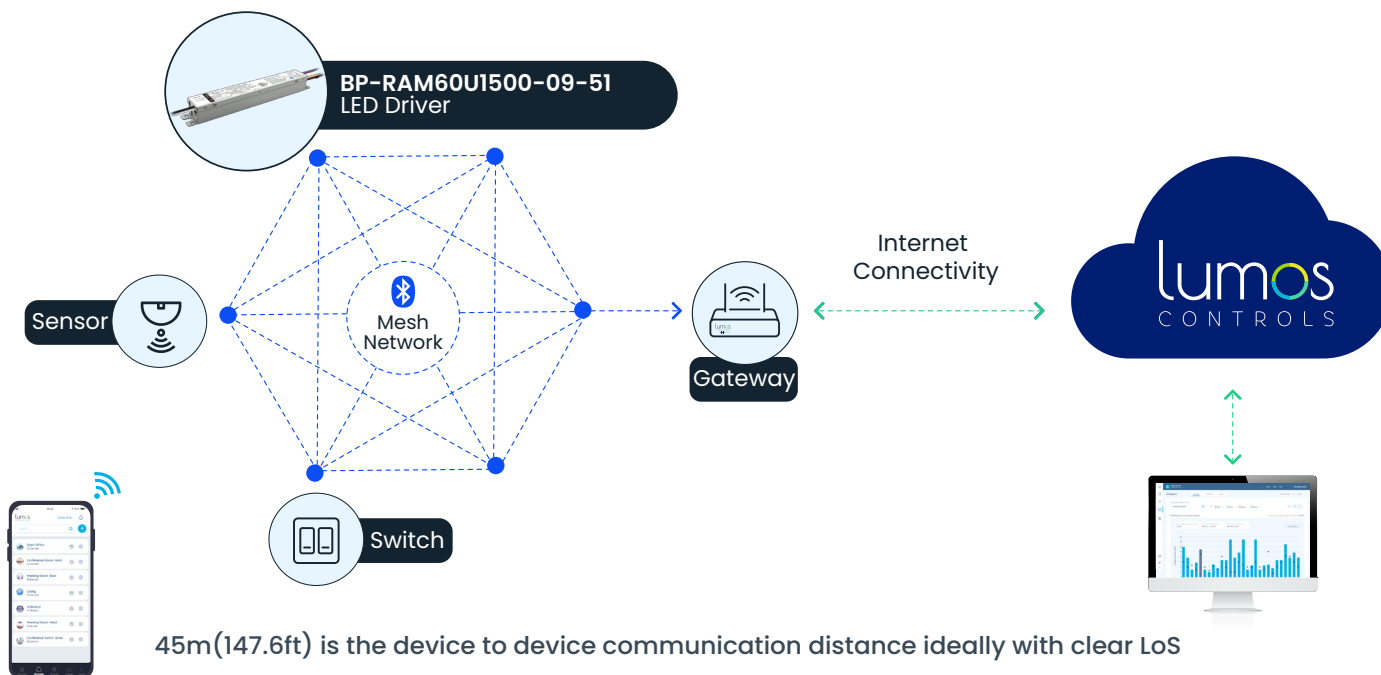


| SW status | 1 | 2 | 3 | 4 |
|----------------------|--------|--------|--------|-------|
| Output current | 1500mA | 1250mA | 1000mA | 750mA |
| Output voltage range | 30~40 | | | |

Wiring



Smart Ecosystem



Ordering Information

| Product Code | Vin(AC) | Iout/Max | Vout | Max.Pout |
|---------------------|----------|----------|--------|----------|
| BP-RAM60U1500-09-51 | 120-277V | 1500mA | 30-40V | 60W |

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