



# 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
Rated Power (W)CW			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	5%~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 LNIkV, 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)

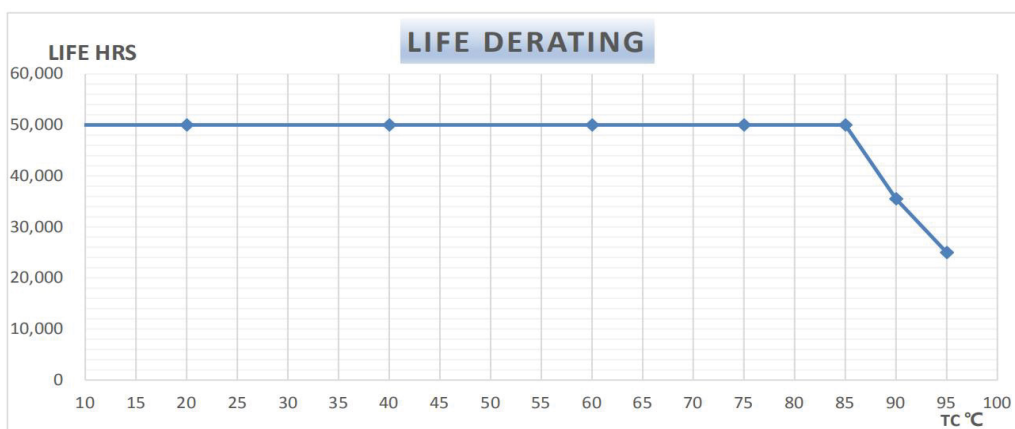
## Protection

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

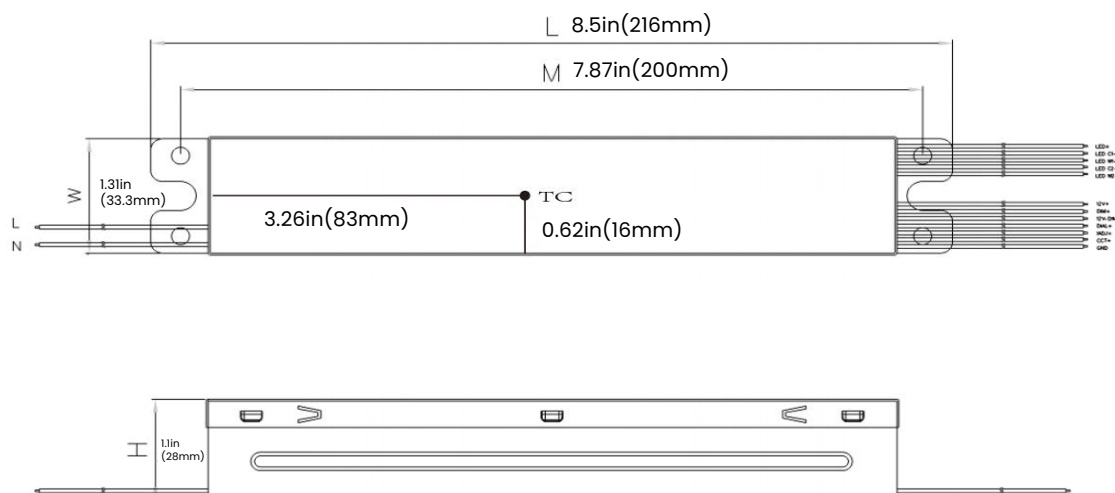
## Environment

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



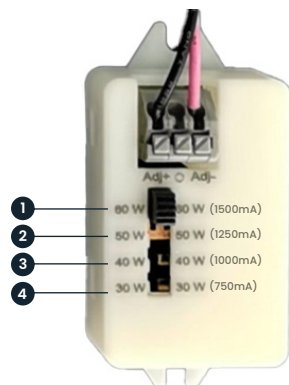
## Wire Description



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

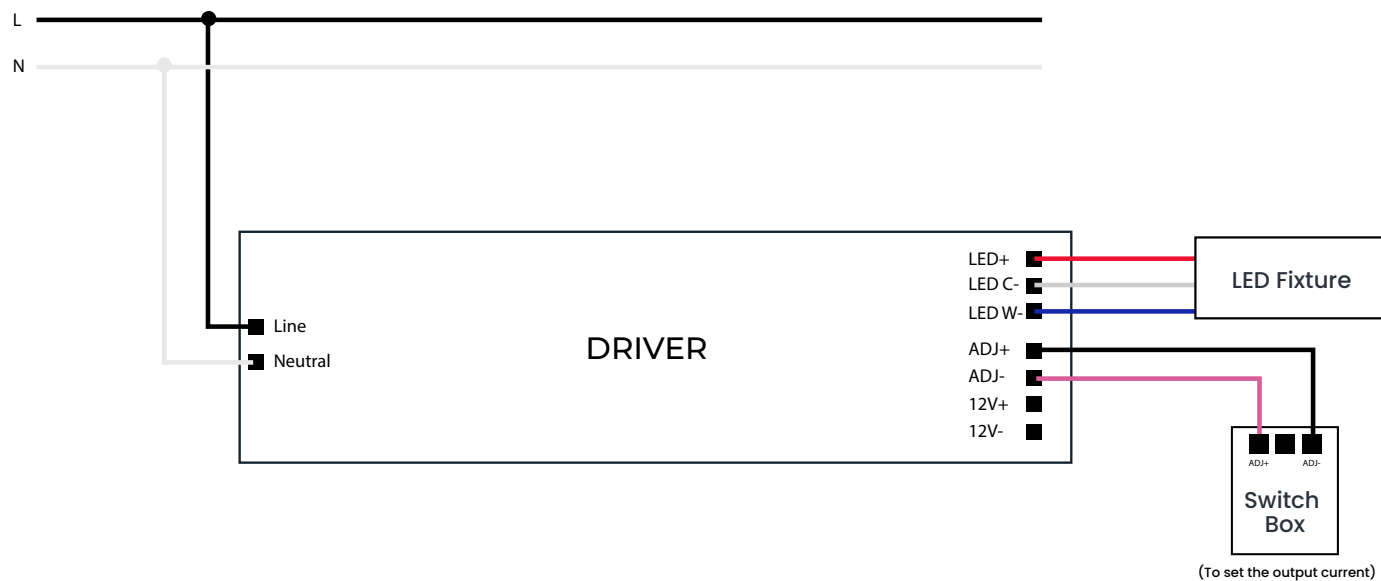
## Setting the output current (Optional)

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.

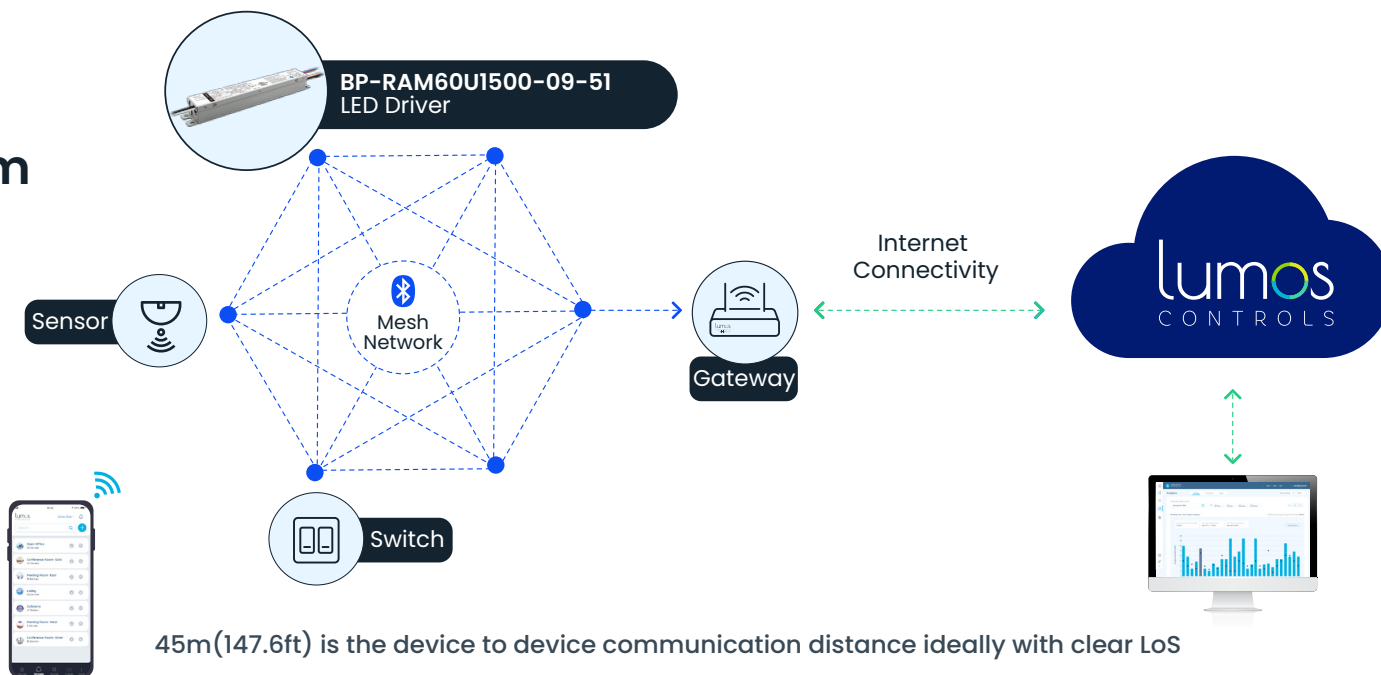


SW status	1	2	3	4
Output current	1500mA	1250mA	1000mA	750mA
Output voltage range	30~40			

## 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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