# Zigbee 3.0 Constant Current LED Driver

- Tuya APP cloud control, support brightness adjust, delay turn on/off, timer run, scene edit, sleep wake-up and biorhythms function
- Philips HUE APP control by connect with Philips HUE bridge
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu smart speaker
- Can relay and route to each other, up to 15 hops
- Match with Zigbee 3.0 remote or scene panel control optional
- Reset key for clearing network connection
- Universal AC input / Full range, High PF, High efficiency, Flicker Free
- Standby power input<0.5W, meets the requirements of ERP certification
- 2 channel constant current output, configurable current via DIP switch
- Over-load / Short circuit protection, recover automatically
- Class II design, SELV safety ultra-low voltage
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty













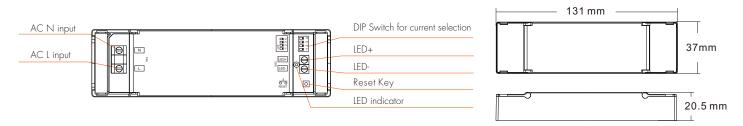




# **Applications**

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

# Mechanical Structures and Installations



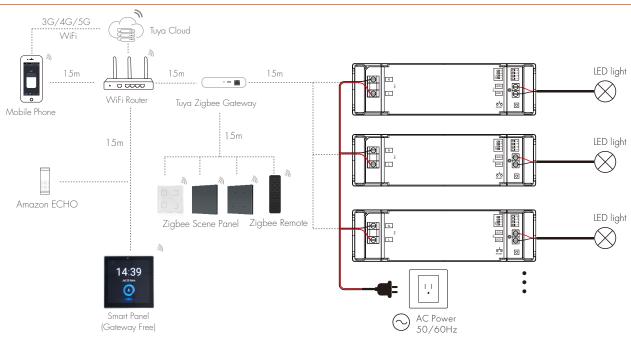
# **Technical Parameters**

| Output      | Output Voltage              | 10~42VDC  |
|-------------|-----------------------------|---|
|             | Max Output Voltage          | 48VDC   |
|             | Output Current              | 100-700mA   |
|             | Output Power                | Max.12W   |
|             | Dimming Range               | 0~100%, dimming depth:0.5%  |
|             | PWM Frequency               | 4KHz  |
|             | Current Accuracy            | 100mA gear ± 10%, the rest of the gear ± 5%   |
|             | Ripple & Noise              | <5%(Maximum current non dimming state)  |
|             | Input Voltage Range         | 100~240VAC  |
|             | Frequency Range             | 50/60Hz   |
|             | Efficiency(TYP)             | >80% (350mA at full load)   |
|             | Input Current               | <0.15A/115VAC, <0.08A/230VAC  |
|             | Power Factor                | >0.95/115VAC, >0.9/230VAC   |
| Input       | THD                         | <12% / 230VAC(at full load)   |
|             | Anti Surge                  | L-N:1.5KV   |
|             | Inrush Current              | Cold start8A, 135us duration(50%   peak) / 230VAC   |
|             | Leakage Current             | < 0.6mA/230VAC  |
|             | Standby Power/No Load Power | <0.5W (DIMMING OFF)   |
|             | Over Load Power             | Current decrease or Hiccup, recovers automatically after fault condition is removed           |
| Protection  | Short Circuit               | Output short-circuit, shut down the output; after troubleshooting, restore the output         |
|             | Over Temperature            | Current decrease when PCB temp>100°C, recovers automatically after fault condition is removed |
|             | Woking Temperature          | -20°C~50°C  |
|             | T-case Max                  | 80°C  |
| Environment | Working Humidity            | 20%~90%RH, non-condensing   |
| Environment | Storage Temp/Humidity       | -40°C~80°C, 10%~95%RH   |
|             | Temperature Coefficient     | ±0.03%/°C (0-50%)   |
|             | Vibration Resistance        | 10-500Hz, 2G, 6min/cycle, X,Y,Zaxes/2min  |
| Safety&EMC  | Security Specifications     | CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015                            |
|             | Withstand Voltage           | I/PO/P: 3750VAC   |
|             | Insulation Resistance       | I/PO/P: 100M/500VDC/25°C/70%RHΩ   |
|             | EMC Emission                | CE-EMC:EN55015,EN61000-3-2,EN61000-3-3  |
|             | EMC Immunity                | CE-EMC: EN61000-4-2,3,4,5thunderbolt1KV],6,11   |
|             | Certications                | CE  |



| 1 2 3 4        |          |           |          |            |                  |            |         |                     |         |          |         |            |                |
|----------------|----------|-----------|----------|------------|------------------|------------|---------|---------------------|---------|----------|---------|------------|----------------|
| Output Voltage | 9-42V    | 9-42V     | 9-42V    | 9-42V      | 9-40V            | 9-34V      | 9-30V   | 9-26V               | 9-24V   | 9-22V    | 9-20V   | 9-18V      | 9-1 <i>7</i> V |
| Output Current | 100mA    | 150mA     | 200mA    | 250mA      | 300mA            | 350mA      | 400mA   | 450mA               | 500mA   | 550mA    | 600mA   | 650mA      | 700mA          |
| Output Power   | 0.9-4.2W | 1.35-6.3W | 1.8-8.4W | 2.25-10.5W | 2. <i>7</i> -12W | 3.15-11.9W | 3.6-12W | 4.05-11. <i>7</i> W | 4.5-12W | 4.95-12W | 5.4-12W | 5.85-11.7W | 6.3-11.9W      |

# System wiring



#### Note:

- 1. The above distance is measured in spacious (no obstacle) environment, Please refer to the actual test distance before installation.
- 2. Please check if the WiFi router net in 2.4G band, the 5G band is not available, and do not hide your router network.
- 3. Please keep the distance between LED driver and router close, and check the WiFi signals.
- 4. Users must use the Tuya ZigBee gateway to realize remote control and voice control (The smart panel integrate Zigbee gateway function).

### App Operating Instructions

### 1. Network pairing

- Download the Tuya APP and register an account, search and add the Tuya Zigbee gateway device.
- Quickly press the "RESET" button five times or repeat power on and off five times to clear the previous network connection, enter pairing mode with the output light breathes blinking.
- Under the gateway, search and add new device. If the network connection is successful, you can find ZBS-DIM devices in Tuya APP.

### 2. Lighting control settings

After pairing the light device, click the device and change brightness by touch brightness slide.

In "Scene", there are 4 scene can be recalled or customized.

In "Setting", there are Plan, Schedule, Timer, Rhythms, Power-on behavior functions.







### Installation note

- 1. This product must be installed and adjusted by a qualified professional.
- 2. This product is non-waterproof, When installed outdoors, please ensure it is mounted in a water proof enclosure.
- 3. LED driver should keep a certain distance from the heating stuff(such as the luminaries radiator).
  The installation interval between the product and the product is recommended to be 15cm, so as not to affect the service life due to poor heat dissipation of the product.
- 4. Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- 5. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.