

# V2-S(WZ)

## ZigBee 2 Colors 2 Wires LED Strip Controller

### Features

- Only apply to 2-wires VWW+CW LED strip.
- Tuya smart APP cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene and music play function.
- Philips HUE APP control by connect with Philips HUE bridge.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- Match with RF 2.4G remote control optional.
- Each V2-S(WZ) controller can also work as ZigBee-RF converter, then use Tuya smart APP to control one or more RF CCT LED controller synchronously.
- Switch 3 levels color temperature(VWW, NVW, CW) in consecutive power-on sequence.
- PWM frequency 2KHz, 8KHz or 16KHz selectable.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Fade in and out effect selectable.

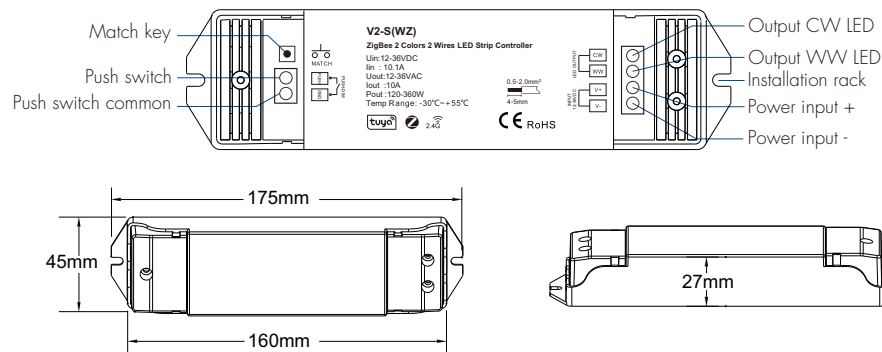


CE RoHS

### Technical Parameters

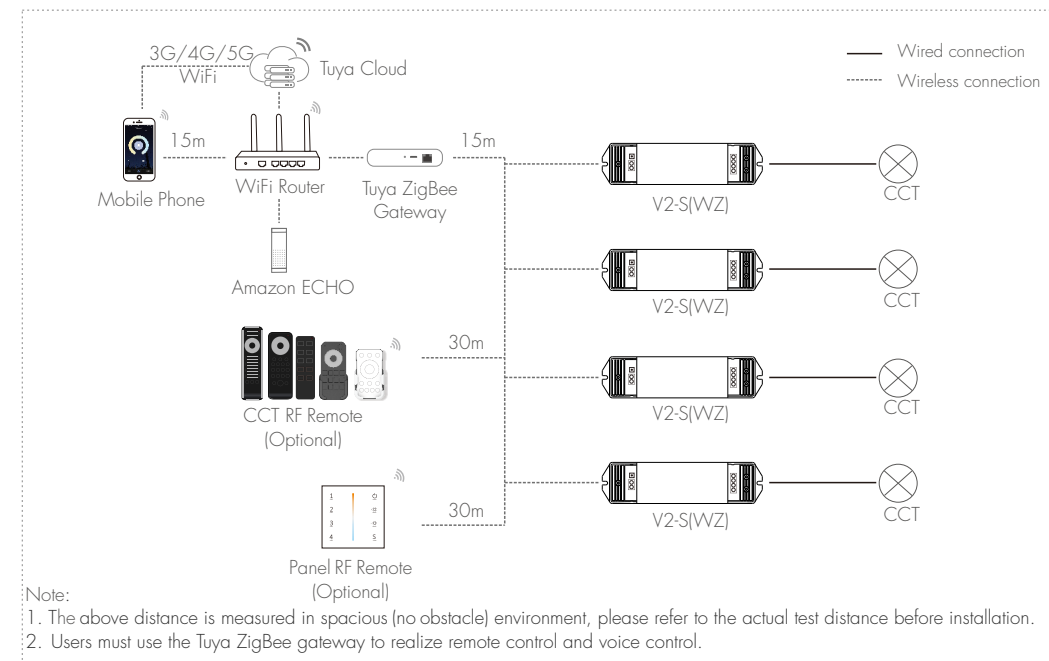
| Input and Output        |                  | Dimming data            |                               | Safety and EMC  |                                                           |
|-------------------------|------------------|-------------------------|-------------------------------|-----------------|-----------------------------------------------------------|
| Input voltage           | 12-36VDC         | Input signal            | ZigBee + RF + Push Dim        | EMC standard    | EN IEC 55015/<br>EN IEC 61547/ETSI<br>EN 301 489-1/-3/-17 |
| Input current           | 10.1A            | Control distance        | 30m(Barrier-free space)       | Safety standard | EN 61347-1/-2                                             |
| Output voltage          | 12-36VAC         | Dimming gray scale      | 256 levels                    | Radio Equipment | ETSI EN 300 440<br>ETSI EN 300 328                        |
| Output current          | 10A              | Dimming range           | 0-100%                        | Certification   | CE RoHs                                                   |
| Output power            | 120-360W         | Dimming curve           | Linear                        | Package         |                                                           |
| Output type             | Constant voltage | PWM Frequency           | 2KHz(default),<br>8KHz, 16KHz | Size            | L178 x W50 x H38mm                                        |
| Warranty and Protection |                  | Environment             |                               | Gross weight    | 0.136kg                                                   |
| Warranty                | 5 years          | Operation temperature   | Ta: -30°C ~ +55°C             |                 |                                                           |
| Protection              | Reverse polarity | Case temperature (Max.) | Tc: +85°C                     |                 |                                                           |

### Mechanical Structures and Installations

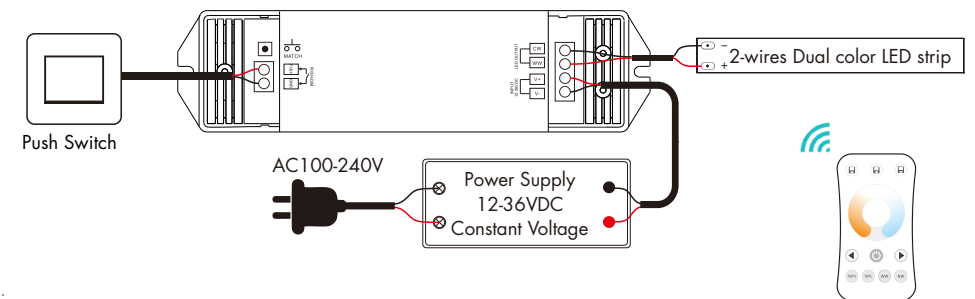


ZigBee

### System Wiring



### Wiring Diagram



Note:

1. Switch off the power, then switch on power, repeat again.  
Immediately short press match key 3 times, the light on/off time will change between 3s and 0.5s.
2. Continuous power off and on operation will change 3 levels color temperature (VWW, NVW and CW) in sequence.

### Push Dim

|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| Click                    | ON/OFF                                                             |
| Double Click             | Turn on at 100% or 10%(night light) and vice-versa                 |
| Long press(>1s) from OFF | Color temperature UP/DOWN (turn off and turn on to return dimming) |
| Long press(>1s) from ON  | Dimming UP/DOWN                                                    |

## PWM Frequency Setting

At the moment of power-up:  
Long press MATCH key for 2s, set PWM frequency to 2KHz, LED indicator flash once.  
Long press MATCH key for 5s, set PWM frequency to 8KHz, LED indicator flash twice.  
Long press MATCH key for 10s, set PWM frequency to 16KHz, LED indicator flash 3 times.  
The factory default PWM frequency is 2KHz.  
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

PWM frequency and output current mapping:

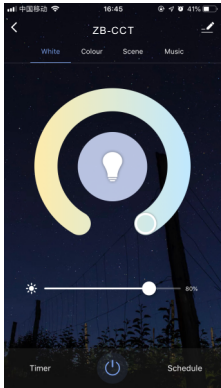
| $\frac{U_{in}}{U_{out}}$ PWM | 2KHz | 8KHz | 16KHz |
|------------------------------|------|------|-------|
| 12/36V                       | 10A  | 5A   | 3A    |

## Tuya Smart APP Network Connection

Press and hold Match/Set key for 5s, or push twice Match/Set key fastly:  
Clear previous network connection, enter config mode,  
the blue LED indicator fast flash, the output LED will flash 10 times.  
  
Repeat power on and off for 5 consecutive times,  
also clear previous network connection, enter config mode, the output LED will flash 10 times.

If Tuya smart APP network connection succeed, the blue LED indicator will stop flash,  
and in Tuya smart APP, you can find the ZB-CCT device.

## Tuya Smart APP Interface



Touch color wheel to adjust color temperature.  
Touch brightness slide to adjust brightness.

## V2-S(WZ) Match Remote Control (Optional)

End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use the V2-S(WZ)'s Match key

Match:  
Short press match key of V2-S(WZ),  
immediately press on/off key (single zone remote)  
or zone key (multiple zone remote) on the remote.  
The LED indicator fast flash a few times means match  
is successful.  
  
Delete:  
Press and hold match key of V2-S(WZ)  
for 10s to delete all match,  
The LED indicator fast flash a few times  
means all matched remotes were deleted.

### Use Power Restart

Match:  
Switch off the power of V2-S(WZ), then switch on power,  
repeat again.  
Immediately short press on/off key (single zone remote)  
or zone key (multiple zone remote) 3 times on the remote.  
The light blinks 3 times means match is successful.  
  
Delete:  
Switch off the power of V2-S(WZ), then switch on power,  
repeat again.  
Immediately short press on/off key (single zone remote)  
or zone key (multiple zone remote) 5 times on the remote.  
The light blinks 5 times means all matched remotes were deleted.

## V2-S(WZ) Work as ZigBee-RF Converter to Match RF CCT LED Controller

End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use the controller's Match key

Match:  
Short press match key of the controller,  
immediately press on/off key on the Tuya smart APP.  
The LED indicator fast flash a few times means match  
is successful.  
  
Delete:  
Press and hold match key of the controller for 5s,  
The LED indicator fast flash a few times means match  
was deleted.

### Use Power Restart

Match:  
Switch off the power of the controller, then switch on power,  
repeat again.  
Immediately short press on/off key 3 times on the Tuya smart APP.  
The light blinks 3 times means match is successful.  
  
Delete:  
Switch off the power of the controller, then switch on power,  
repeat again.  
Immediately short press on/off key 5 times on the Tuya smart APP.  
The light blinks 5 times means match was deleted.