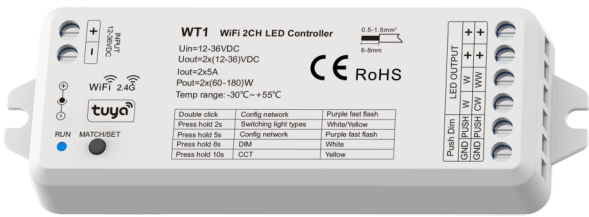# WT1

WiFi & RF 2CH LED Controller

WiFi + RF

- Used for control single color or color temperature LED strip.
- DC power socket input and 2 channel constant voltage output.
- Tuya smart APP cloud control, support on/off, color temperature and brightness adjust, delay turn on/off light, timer run, scene edit function.
- Voice control, support for Amazon Alexa, Google Assistant, Tmall Genie and Xiaodu voice assistant.
- Match with RF 2.4G remote control optional.
- User need set light type by press key before Tuya smart APP network connection and match RF remote of the same light type.
- Each WT1 controller can also work as WiFi-RF converter, then use Tuya smart APP to control one or more RF LED controller or RF LED dimming driver synchronously.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
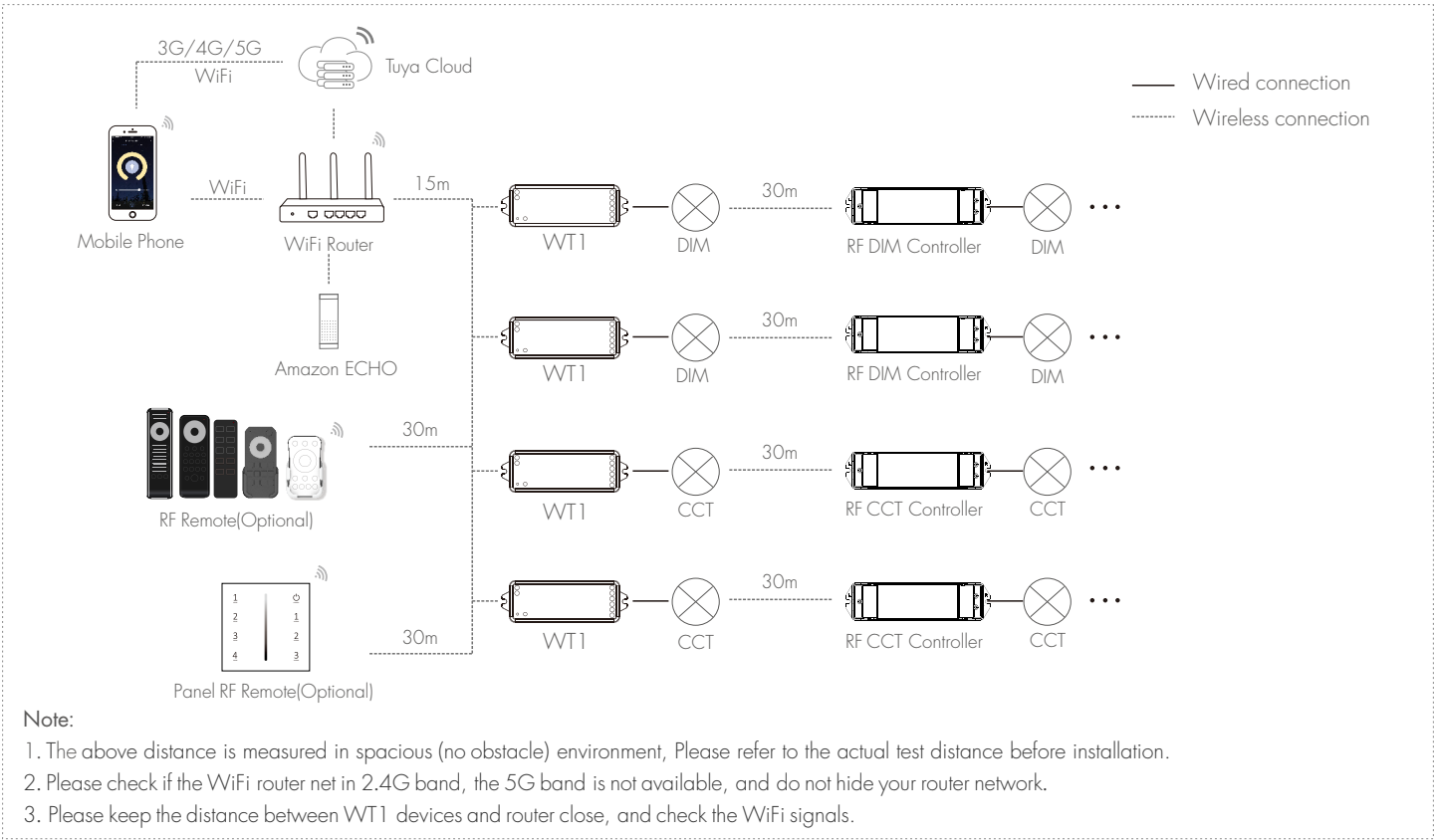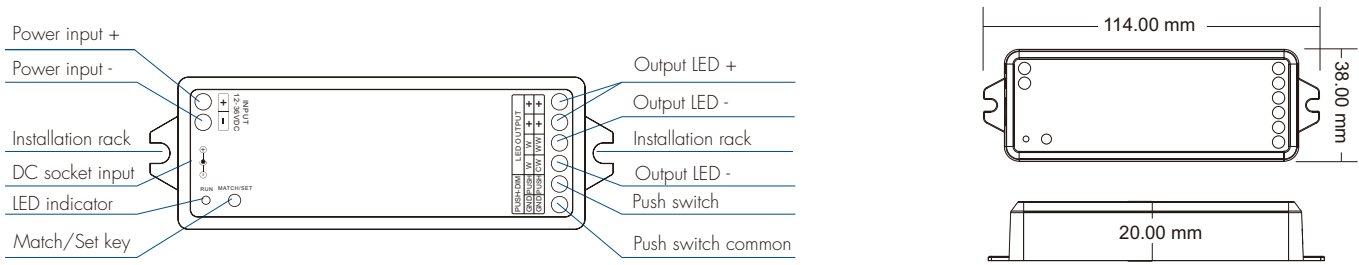- Light on/off fade time 3s selectable.

CE RoHS

Technical Parameters

Input and Output

Input voltage	12-36VDC
Input current	10.5A
Output voltage	2 x (12-36)VDC
Output current	2CH,5A/CH
Output power	2 x (60-180)W
Output type	Constant voltage

Environment

Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C

Dimming data

Input signal	WiFi + RF 2.4GHz + Push Dim
Control distance	30m(Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0 -100%
Dimming curve	Logarithmic
PWM frequency	2000Hz (default)

Warranty and Protection

Warranty	5 years
Protection	Reverse polarity Over-heat Short circuit

Safety and EMC

EMC standard	EN IEC 55015/EN IEC 61547 ETSI EN 301 489-1/-3/-17
Safety standard	EN 61347-1/-2
Radio Equipment	ETSI EN 300 440 ETSI EN 300 328
Certification	CE RoHS

Package

Size	L120 x W43 x H27mm
Gross weight	0.073kg

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 WT1 devices and router close, and check the WiFi signals.

Mechanical Structures and Installations

Power input +
Power input -
Installation rack
DC socket input
LED indicator
Match/Set key

Output LED +
Output LED -
Installation rack
Output LED -
Push switch
Push switch common

114.00 mm
38.00 mm
20.00 mm

Wiring Diagram

● For single color

Dimming remote

Power Adapter 12-36VDC

Single color LED strip
Single color LED strip
Push Switch
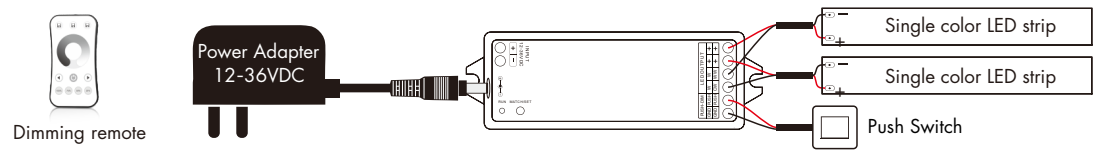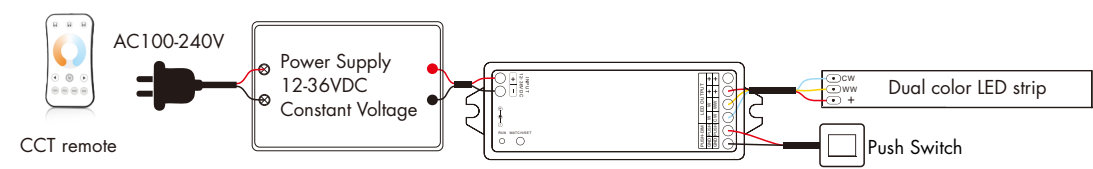
Press and hold match/set key for 8s, until the RUN LED indicator turn white, then release, the controller will become DIM type, then do smart config by Tuya smart APP, or short press match key to match with dimming RF remote.

● For dual color CCT

CCT remote

AC100-240V

Power Supply 12-36VDC Constant Voltage

Dual color LED strip
Push Switch

Press and hold match/set key for 10s, until the RUN LED indicator turn yellow, then release, the controller will become CCT type, then do smart config by Tuya smart APP, or short press match key to match with CCT RF remote.

Note:

1. User can connect constant voltage power supply or power adapter as power input.
2. Press and hold Match/Set key for 2s, switch 2 kinds light type in sequence.
3. 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.
4. For CCT light, continuous power off and on will change 3 levels color temperature (WW, NW and CW) in sequence.

Push Dim

	Click	ON/OFF
DIM Single color	Double Click	Turn on at 100% or 10%(night light) and vice-versa
	Long press(>1s) from OFF	Dimming UP/DOWN
	Long press(>1s) from ON	Dimming UP/DOWN
CCT Dual Color	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

Tuya Smart APP Network Connection

● Download and open APP
Search for "Tuya Smart/Smart Life APP" in the app store, or scan the QR code on the right to download the APP.
Register and login after installation.

● APP Pairing Network
Push twice Match/Set key fastly, or when press and hold Match/Set key for 8 or10s to set 2 kinds light type:
Clear previous network connection, enter WiFi config mode, the LED indicator flash fastly,
the output LED will flash 10 times.

Press and hold Match/Set key for 2s:
Switch 2 kinds light type in sequence, notice this operation does not automatically clear previous network connection.

Press and hold Match/Set key for 5s:
Clear previous network connection, enter WiFi config mode, the LED indicator flash fastly.

Repeat power on and off for 5 consecutive times, also clear previous network connection, enter WiFi config mode, the output LED will flash 10 times.

If Tuya smart APP network connection succeed, the RUN LED indicator will stop flash purple, and turn corresponding light type color (White: DIM, Yellow: CCT.
and in Tuya smart APP, you can find DIM or CCT device.

When controlling the light with Tuya Smart/Smart Life APP, if the network connection is poor,
you can control the light with Bluetooth connection within the Bluetooth control range.
Note: The light can not be directly controlled by Bluetooth without WiFi configuration.

Smart Life   Tuya Smart
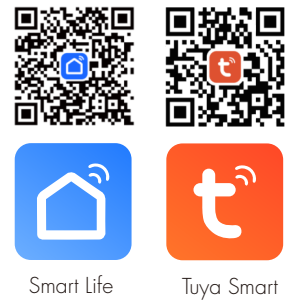
Tuya Smart APP Interface

DIM   CCT
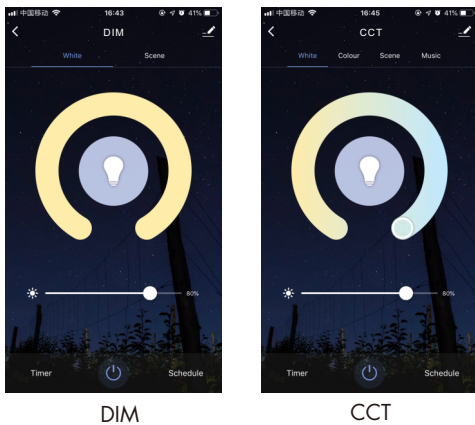
DIM:
Touch brightness slide to adjust brightness.

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

WT1 Match Remote Control (Optional)

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

Use the WT1's Match key	Use Power Restart
Match: Short press match key of WT1, 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.	Match: Switch off the power of WT1, 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: Press and hold match key of WT1 for 15s to delete all match, The LED indicator fast flash a few times means all matched remotes were deleted.	Delete: Switch off the power of WT1, 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.

WT1 Work as WiFi-RF Converter to Match RF LED Controller or Dimming Driver

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

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