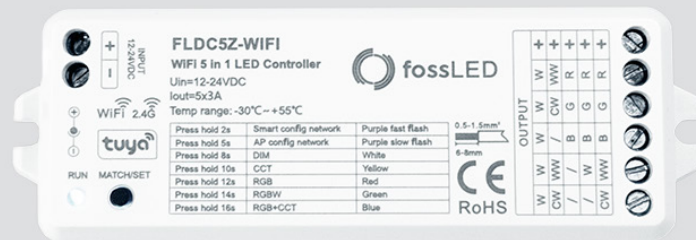# Light Smart Receiver

5 in 1 Multi Colour - RF & WIFI Smart Receiver
FLDC5Z-WIFI

Compatible with all LED Strip types Including Single Colour, Tuneable White, RGB, RGBW and RGB + CCT.

fossLED WIFI receivers offer lighting control from your smart device in conjunction with fossLED Controllers.

Control your lighting from your IOS or Android device. Compatible with Amazon Alexa, Siri and Google Assistant.

Control multiple zones, save scenes, create schedules, remotely control your lighting and even match your lighting to music via the TUYA App.

Input Voltage: 12-24VDC.

Output: 5 x 3A (5 x 36-72W Max in 24VDC), see page 3 for a breakdown of the Wattage limitations for different LED Strip Types.

Optionally match with RF 2.4Ghz fossLED Controllers.

RF 2.4GHz wireless technology, control distance up to 30m (Barrier-free space). Please allow for 12m within areas restricted by obstacles.

IP20 rating, dust resistant only, no resistance to moisture or water.

This product must be installed by a qualified electrician in accordance with instructions provided and in compliance with recognized electrical and safety regulations relevant to the country it is being installed.

PLEASE NOTE:

This product is designed primarily for **residential use** and offers excellent performance when installed in its intended setup, it is not designed to be used as a full home or commercial automation system.

Each lighting **Zone** should be configured to include **only one Wi-Fi receiver**, which can then be extended with additional **RF receivers** to create a mesh network within that zone, or via a wired power repeater system.

Installing **more than two Wi-Fi receivers in the same zone** is not recommended, as it may result in noticeable **lag or synchronization delays**, particularly when using **feature modes** such as RGB, RGBW, or RGB+CCT in a **non-static Play Mode**. However, this limitation has minimal impact when controlling **single colour lighting**, where the control is limited to **switching and dimming**.

Another factor to consider is **Wi-Fi congestion**. In modern homes, where numerous devices (TVs, smartphones, tablets, smart appliances, etc.) are connected to the same router, bandwidth can become limited. This may cause receivers to drop offline or struggle to remain synchronised. For this reason, in **medium-use households**, we recommend a maximum of **five Wi-Fi controllers** per installation. This recommendation may vary depending on router quality, network setup, and the number of connected devices.

Finally, we always strongly advise pairing each Wi-Fi receiver with at least one **physical control device**—such as a remote, wall panel, or RF dimmer. This ensures you retain control over your lighting even if your home Wi-Fi network experiences temporary issues.
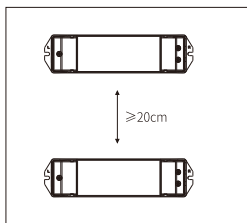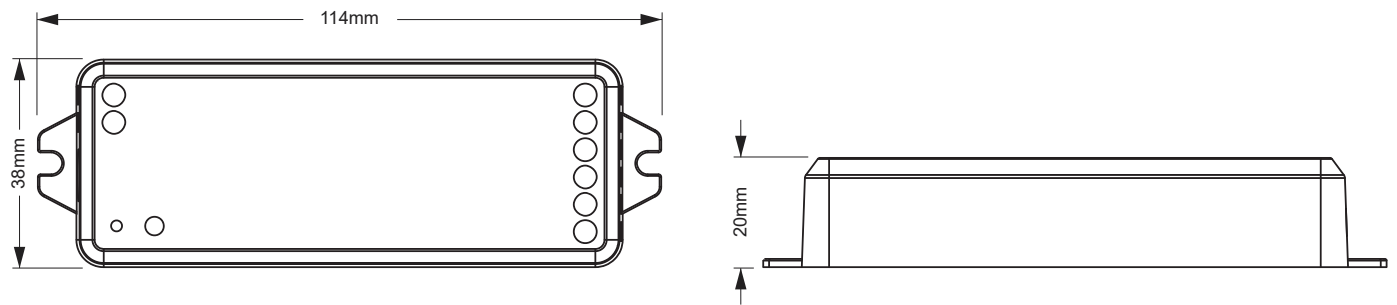
For larger home or commercial installations, please **contact us**:
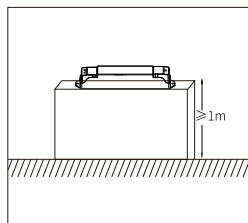
sales@fossled.co.uk
+44 (0)203 198 1908
www.fossled.com

INSTALLATION DIMENSIONS:
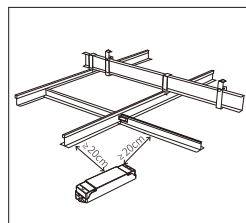

114mm

38mm

20mm

≥20cm

Do not stack products. The distance between products should be ≥20cm, to avoid poor heat dissipation affect lifespan.

≥1m

Do not put the product on the ground. The installation height should be ≥1m, to avoid shortening the remote control distance due to weak reception signal.

Not to be close to or covered by metal objects, with an interval of ≥20cm to avoid signal attenuation and shorten the remote distance.
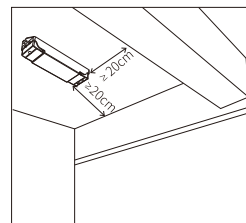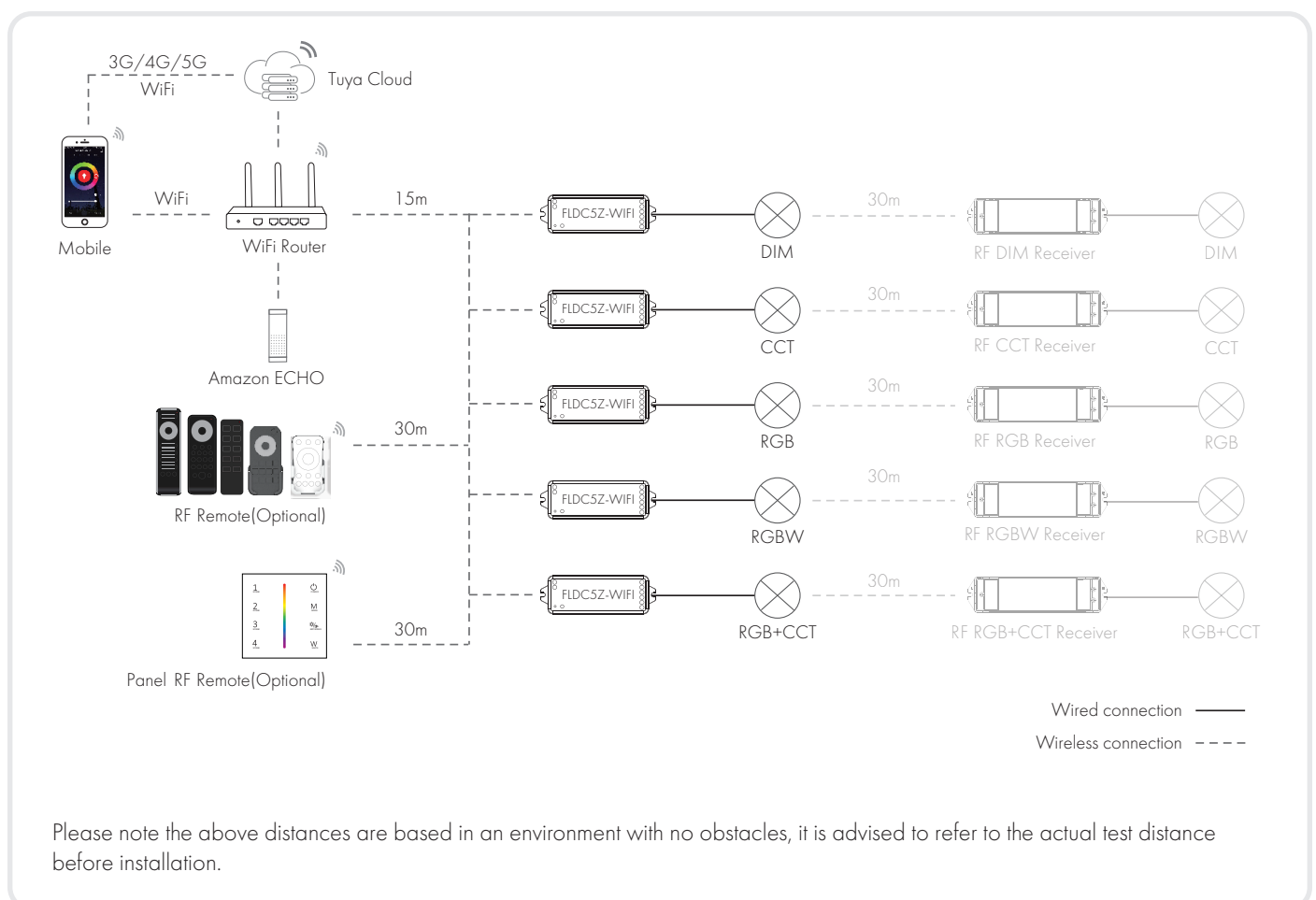

Avoid installation at the corner of the wall/ beam, with an interval of ≥20cm to avoid signal interference.
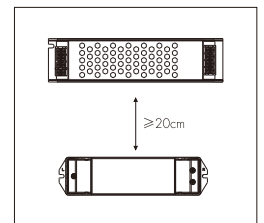
≥20cm
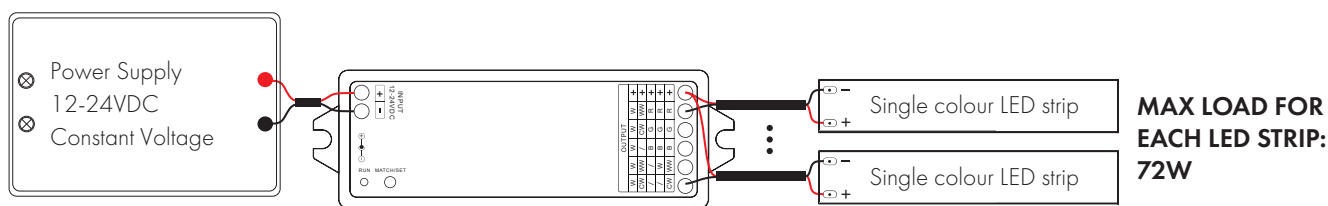
The product shall not be installed close to the switching power supply with an interval of ≥20cm to avoid radiation interference of the switching power supply.

SYSTEM WIRING:

3G/4G/5G WiFi · Tuya Cloud

WiFi

Mobile

WiFi · WiFi Router

Amazon ECHO

RF Remote(Optional)

Panel RF Remote(Optional)

15m

30m

30m

FLDC5Z-WIFI — DIM — 30m — RF DIM Receiver — DIM

FLDC5Z-WIFI — CCT — 30m — RF CCT Receiver — CCT

FLDC5Z-WIFI — RGB — 30m — RF RGB Receiver — RGB

FLDC5Z-WIFI — RGBW — 30m — RF RGBW Receiver — RGBW

FLDC5Z-WIFI — RGB+CCT — 30m — RF RGB+CCT Receiver — RGB+CCT

Wired connection ———
Wireless connection ----

Please note the above distances are based in an environment with no obstacles, it is advised to refer to the actual test distance before installation.

WIRING DIAGRAMS:

SINGLE COLOUR

MAX LOAD FOR EACH LED STRIP: 72W

CCT

MAX LOAD FOR EACH LED STRIP: 144W

RGB

MAX LOAD FOR EACH LED STRIP: 216W

RGBW

MAX LOAD FOR EACH LED STRIP: 288W

RGB+CCT

MAX LOAD FOR EACH LED STRIP: 360W
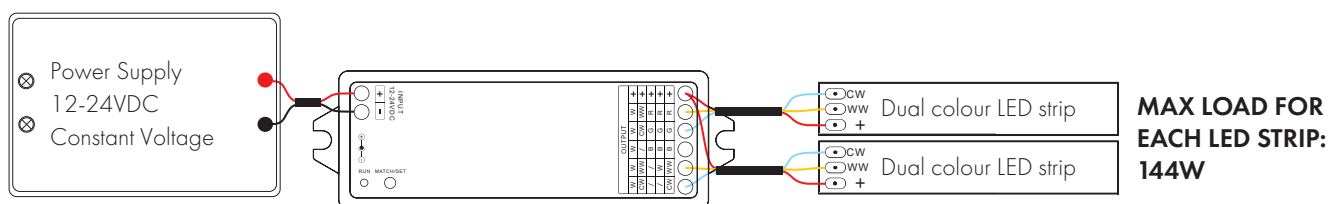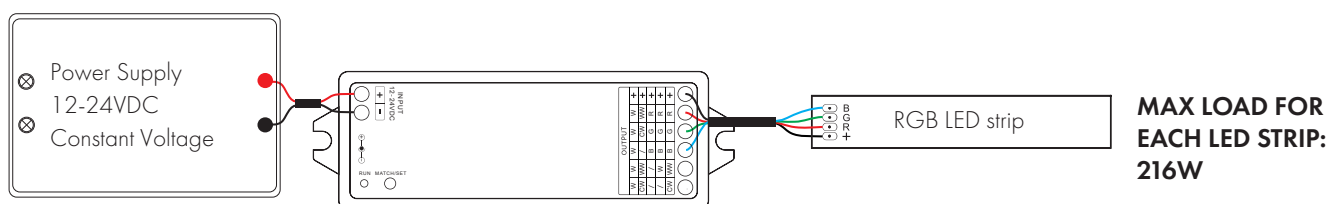
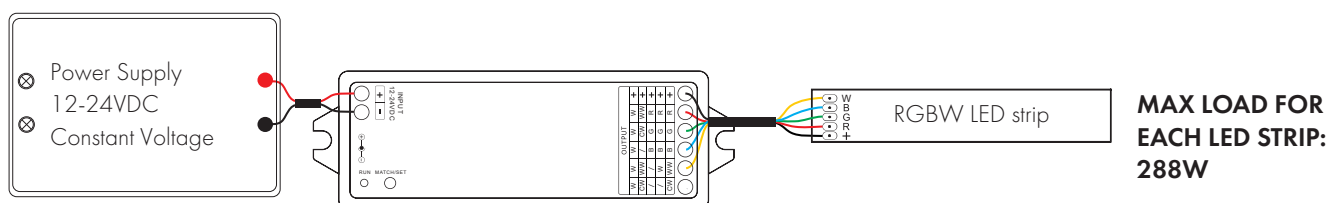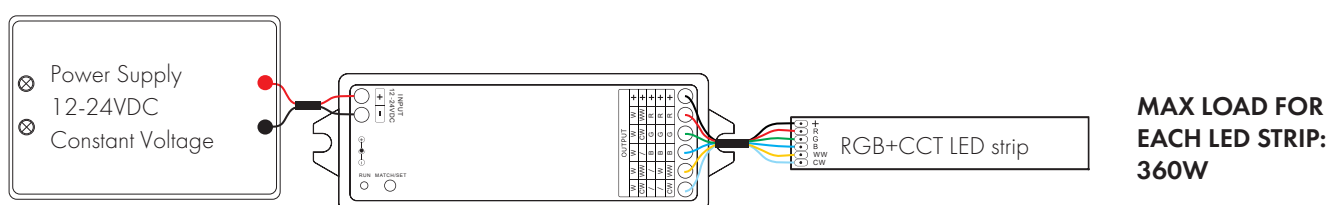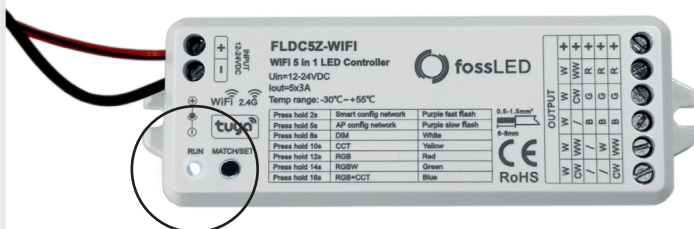## LED STRIP TYPE SET UP:

Please note that it is advised to **cycle through the colours** a few times to ensure that the desired mode is correctly selected.

For LED Strip Type setup press and hold the **MATCH/SET Key**. The controller will cycle through the various setup options, signalled by the **LED indicator** colour. Once the desired mode is shown, then release, and Quick Press the **MATCH/SET Key** to confirm setup.

1 Press and hold for **2 seconds** for **Smart config network** indicated by **Purple fast flash**

2 Press and hold for **5 seconds** for **AP config network** indicated by **Purple slow flash**

3 Press and hold for **8 seconds** for **SINGLE COLOUR** indicated by **White**

4 Press and hold for **10 seconds** for **CCT** indicated by **Yellow**

5 Press and hold for **12 seconds** for **RGB** indicated by **Red**

6 Press and hold for **14 seconds** for **RGBW** indicated by **Green**

7 Press and hold for **16 seconds** for **RGB+CCT** indicated by **Blue**

SMART APP SETUP:

Please download the corresponding Tuya Smart App according to your region by scanning the QR Code opposite. Alternatively visit the App Store or Google Play Store and search "Tuya Smart".

Ensure your device is connected to a 2.4GHz WIFI network and Bluetooth is enabled.

1. Open the Tuya Smart App and login to your existing account or follow the steps to create a new account.
2. Add device using the "+" icon on the top right of the home page.
3. The Receiver should appear, indicated with the fossLED logo and named as per your Strip type selection, for example, "WIFI RGBW".
4. Once the receiver has been selected, please enter your WIFI password as prompted.
5. Wait for a few seconds for the device to be added.

For trouble shooting please follow the below link:
https://smartapp.tuya.com/tuyasmart/help

To remove a receiver from your Tuya Smart App: Power cycle ON and OFF on your receiver for 5 consecutive times, the output LED will flash 10 times to confirm the device pairing has been deleted.

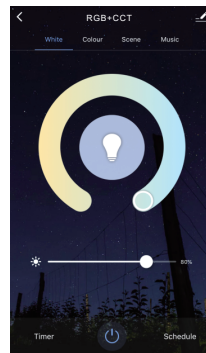## BASIC SMART APP INTERFACE:
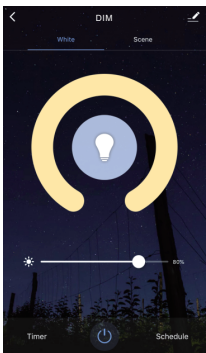
White interface
For DIM type: Touch brightness slide to adjust brightness.

For RGB type: Touch brightness slide, get RGB mixed white firstly, then to adjust white brightness.
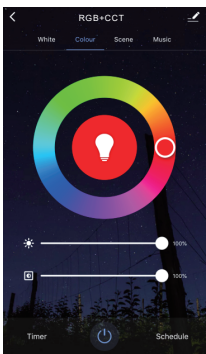
For RGBW type: Touch brightness slide, adjust white channel brightness.

Colour temperature interface
For CCT type: Touch colour wheel to adjust colour temperature. Touch brightness slide to adjust brightness.

For RGB+CCT type: Touch colour wheel to adjust colour temperature, RGB will turn off automatically. Touch brightness slide to adjust white brightness.

Colour interface
For RGB or RGBW type: Touch colour wheel to adjust static RGB colour. Touch brightness slide to adjust colour brightness. Touch saturation slide to adjust colour saturation, namely gradient from the current colour to white (RGB mixed).

For RGB+CCT type: Touch colour wheel to adjust static RGB colour, WW/CW will turn off automatically. Touch brightness slide to adjust colour brightness. Touch saturation slide to adjust color saturation, namely gradient from the current colour to white (RGB mixed).
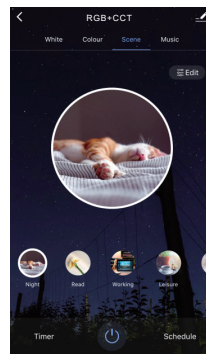
Scene interface
The 1-4 scene is static colour for all light type. the inner colour of these scene can be editable. The 5-8 scene is dynamic mode for RGB, RGBW, RGB+CCT type, such as green fade in and fade out, RGB jump, 6 colour jump, 6 colour smooth.


Music, Timer and Schedule
The music play can use smart phone music player or micro-phone as music signal input. The Timer key can turn on or turn off light in the next 24 hours. The Schedule key can add multiple timers to turn on or turn off light according to different time periods.

MATCHING THE RECEIVER TO A RF CONTROLLER (OPTIONAL):

There are two options for matching and deleting the receiver to a suitable controller, for example FLCT1S.
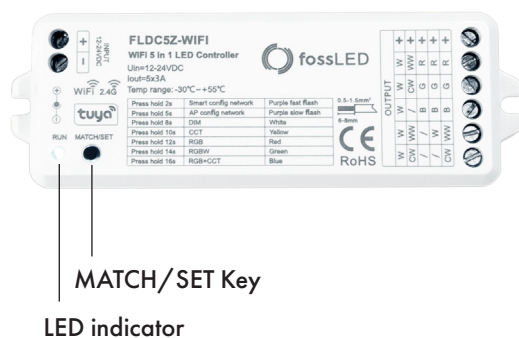
Example receiver: FLCT1S.

ON/OFF Key

MATCH/SET Key

LED indicator

Use the Receivers Match Key
Match: Short press the **MATCH/SET Key**, immediately press the **ON/OFF Key** (single zone remote) or **ZONE Key** (multiple zone remote) on the controller.
The **LED indicator** will fast flash a few times, which means the match is successful.

Use Power Restart
Match: Switch off the power to the receiver, then switch the power on, repeat this again. Immediately short press the **ON/OFF Key** (single zone remote) or **ZONE Key** (multiple zone remote) **THREE** times on the controller.
The light will flash **THREE** times, which means the match is successful.

Delete: Switch off the power to the receiver, then switch the power on, repeat this again. Immediately short press the **ON/OFF Key** (single zone remote) or **ZONE Key** (multiple zone remote) **FIVE** times on the controller. The light will flash **FIVE** times meaning all matched controllers are deleted.
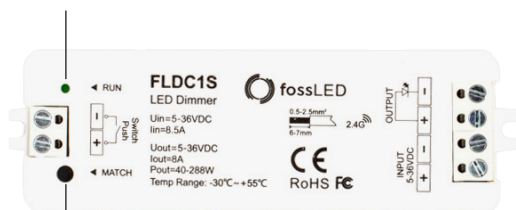
USING THE WIFI RECEIVER TO CONTROL ANOTHER RF RECEIVER (OPTIONAL):

There are two options for matching and deleting the FLDC5Z-WIFI to another suitable receiver through the Tuya Smart App.
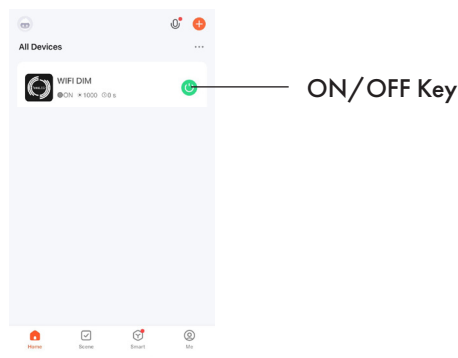
Suitable example additional receiver: FLDC1S.

Tuya Smart App home screen linked to an existing FLDC5Z-WIFI.

LED indicator

ON/OFF Key

MATCH/SET Key

Use the Receivers Match Key
Match: Short press the **MATCH/SET Key**, immediately press the **ON/OFF Key** on the Tuya smart App.
The **LED indicator** will fast flash a few times, which means the match is successful.

Delete: Press and hold the **MATCH/SET Key** on the receiver for **5s**.
The **LED indicator** will fast flash a few times, which means the match is deleted.

Use Power Restart
Match: Switch off the power to the receiver, then switch the power on, repeat this again. Immediately short press the **ON/OFF Key THREE** times on the Tuya Smart App.
The light will flash **THREE** times, which means the match is successful.

Delete: Switch off the power to the receiver, then switch the power on, repeat this again. Immediately short press the **ON/OFF Key FIVE** times on the Tuya Smart App. The light will flash **FIVE** times meaning the matched controller is deleted.

TECHNICAL:

Input and Output	
Input voltage	12-24VDC
Input current	15.5A
Output voltage	5 x (12-24)VDC
Output current	5CH, 3A/CH
Output power	5 x (36-72)W, see page 3
Output type	Constant voltage

Package	
Size	L120 x W43 x H35mm
Gross weight	0.073kg

Dimming data	
Input signal	WIFI + RF 2.4GHz
Control distance	30m (Barrier-free space)
Dimming gray scale	4096 (2^12) levels
Dimming range	0 - 100%
Dimming curve	Logarithmic
PWM frequency	1000Hz (default)

Environment	
Operation temperature	Ta: -30°C ~ +55°C
Case temperature (Max.)	Tc: +85°C
IP rating	IP20

Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Over-heat Short circuit

Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard (LVD)	EN 61348-1:2015+A1:2021 EN 61348-2-13:2014+A1:2017
Radio Equipment (RED)	ETSI EN 300 328 V2.2.2
Certification	CE,EMC,RED