FlowLite

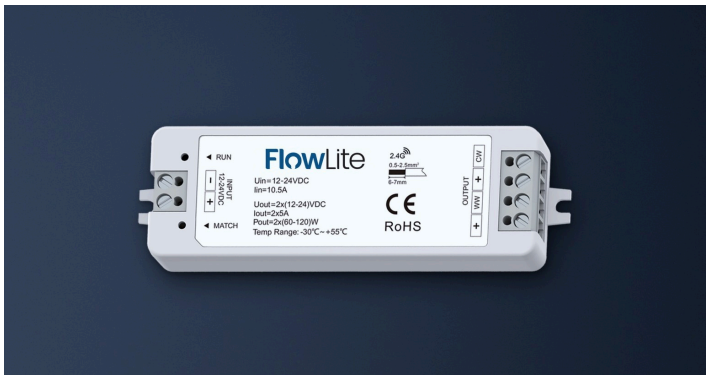
Specification Sheet
RF LED Controller

Tunable White Controller & Remote FL-CTL-TW

A two-channel RF controller with a touch color-wheel remote for dual-color (tunable-white) LED tape. It sits between a 12–24V DC constant-voltage power supply and the tape, sets the warm/cool white balance and dims from 0 to 100% in 4096 smooth, flash-free steps.

AT A GLANCE

Type	RF controller + remote, 2 channels (WW, CW)
Input	12–24V DC, 10.5 A
Output	2 × 5 A, 2 × (60–120 W), constant voltage
Dimming	0–100%, 4096 levels, linear
Control	RF 2.4 GHz remote, 30 m
IP rating	IP20
Protection	Reverse polarity, short circuit
Remote	RF 2.4 GHz, CR2032 battery, 1-year standby
Warranty	5 years



ORDERING GUIDE

MODEL	TYPE	SERIES
FL-	☐	- ☐
	CTL Controller **RMT** Remote	**TW** Tunable white

Example: **FL-CTL-TW** controller; the remote is FL-RMT-TW

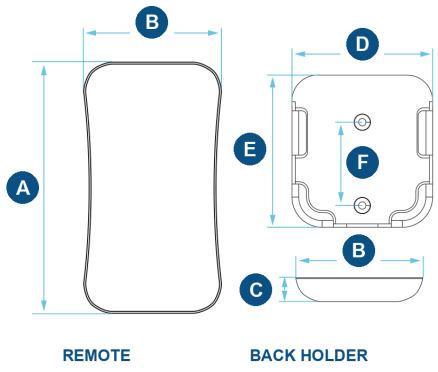
FEATURES

- 4096-level dimming, 0–100%, smooth and flash-free
- Works with single-zone or multi-zone RF 2.4 GHz remotes
- Up to 10 remotes per controller
- Auto-transmitting to the next controller, 30 m apart
- Synchronizes multiple controllers
- Selectable fade in/out
- Remembers the light state after a power cut

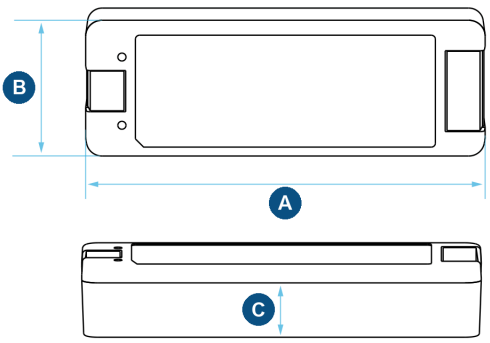
MODELS

MODEL	ITEM	POWER	OUTPUT / SIGNAL	NOTES
FL-CTL-TW	Controller (receiver)	12–24V DC, 10.5 A	2 × 5 A, 2 × (60–120 W)	Up to 10 remotes
FL-RMT-TW	Remote	3V DC (CR2032)	RF 2.4 GHz	30 m range, 1-year standby

DIMENSIONS



REMOTE BACK HOLDER



CONTROLLER

ITEM	A	B	C	D	E	F
FL-CTL-TW	3.82	1.30	0.71	–	–	–
FL-RMT-TW	4.21	2.30	0.35	2.48	2.68	1.46

Inches. D, E and F are the remote's wall back holder (F: screw-hole spacing).

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Specification Sheet
RF LED Controller

TECHNICAL SPECIFICATIONS

INPUT & OUTPUT

Input voltage	12–24V DC
Input current	10.5 A
Output voltage	2 × (12–24)V DC
Output current	2 channels, 5 A per channel
Output power	2 × (60–120 W); up to 120 W per channel at 24V
Output type	Constant voltage

DIMMING

Input signal	RF 2.4 GHz
Control distance	30 m (barrier-free)
Gray scale	4096 (2^{12}) levels
Dimming range	0–100%
Dimming curve	Linear (gamma 1.0)
PWM frequency	2 kHz (default)

WHITE BALANCE (24V)

Cool white	WW 0 W, CW 120 W
Neutral white	WW 60 W, CW 60 W
Warm white	WW 120 W, CW 0 W

PROTECTION

Protection	Reverse polarity, short circuit

ENVIRONMENT

Operating temperature	Ta: -22°F to +131°F
Case temperature (max.)	Tc: +185°F
IP rating	IP20

REMOTE (FL-RMT-TW)

Output signal	RF 2.4 GHz
Working voltage	3V DC (CR2032 battery)
Working current	<5 mA
Standby current	<10 μA
Standby time	1 year
Remote distance	30 m (barrier-free)
Operating temperature	Ta: -22°F to +131°F
Mounting	Back holder, screwed or adhered to the wall
Location	Indoor, dry locations only

PACKAGE

Controller package	4.48 × 1.49 × 1.02 in
Remote package	4.48 × 2.55 × 0.78 in

PHYSICAL

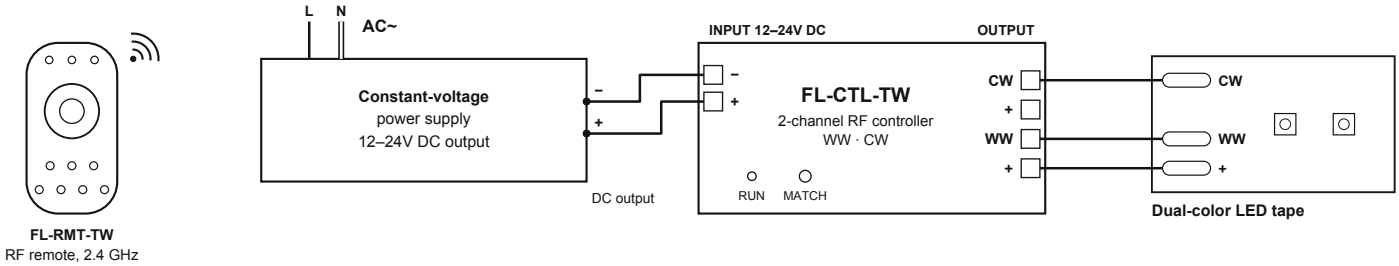
Finish	White
Wire	0.5–2.5 mm², solid or stranded
Strip length	0.24–0.28 in

REMOTE KEYS

On/Off	Light on or off
Color wheel	Touch to change color temperature
Bright + / −	10 levels per press; hold 1–6 s for 256 continuous levels
100% / 50%	Full or half brightness directly
WW / CW	Warm white or cool white directly
Scenes (3)	Press to recall; hold 2 s to save the current color

WIRING DIAGRAM

Tunable-white (dual-color) tape with RF remote



• For reference only. Full steps are on the FL-CTL-TW installation sheet.