

LED Intelligent CT Driver

2.25~20W 250~1000mA 9~54Vdc

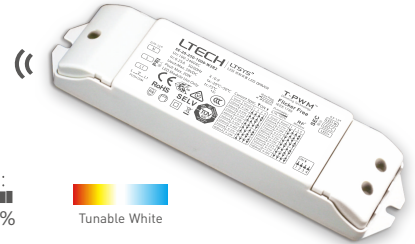
- Control mode: RF 2.4GHz, Push DIM
- T-PWM™ digital dimming, present a perfect visual experience.
- Dimming range: 0~100%, LED start at 0.1% possible.
- With soft-on and fade in function, visual more comfortable.
- 0-100% flicker-free, High frequency exemption level.
- Innovative thermal management technology, intelligent power life protection.
- Over temp. / Over voltage / Over load / Short circuit protection, recover automatically.
- Suitable for internal lights application for I/II/III.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).

T-PWM™
Super depth dimming technology

Flicker-free
IEEE 1789

Dimmable:
0.1% - 100%

Tunable White



5 years warranty



SELV Class 2

RoHS



The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.



Main characteristics

Control mode: RF 2.4GHz, Push DIM
 Input voltage: 100-240Vac (120-300Vdc)
 Frequency: 50/60Hz
 Input current: 115Vac≤0.25A, 230Vac≤0.13A
 Output current: 250-1000mA
 Output power: Max. 20W
 Power factor: PF>0.95/115Vac, PF>0.90/230Vac, at full load
 THD: 230Vac@THD≤9%, at full load
 Efficiency: 83%
 Inrush current(typ.): Cold start 10A at 230Vac (twidth=40μs measured at 50% Ipeak)
 Anti surge: L-N: 2kV
 Leakage current: <0.24mA/230Vac
 Output voltage: 9-54Vdc

Max. output voltage: 59Vdc
 Strobe level: Almost flicker-free / High frequency exemption assessment level.
 Dimming range: 0-100%, 0.1% dimming depth (depend on the wireless master control).
 LF current ripple(<120Hz): <1%
 Current accuracy: ±5%
 Ripple & Noise: ≤2V
 PWM dimming frequency: ≤3600Hz
 Working temperature: ta: -20 ~ 50°C tc: 75°C
 Working humidity: 20 ~ 95%RH, non-condensing
 Storage temp., humidity: -40 ~ 80°C, 10~95%RH
 Temp. coefficient: ±0.03%/°C(0-50°C)
 Vibration: 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.

LED current selection

DIP switch for 8 optional currents' quick selection(see the table below).

* Please choose the current value when the driver is power off.

Choose current via DIP switch

SE-20-250-1000-W2R2	DIP switch	⬇⬇⬇⬇	⬇⬇⬇⬆	⬇⬇⬆⬆	⬇⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	ON ⬇ OFF
	Output current	250mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	
	Output voltage	9-54V	9-54V	9-54V	9-50V	9-45V	9-40V	9-37V	9-34V	
	Output power	2.25-13.5W	2.7-16.2W	3.15-18.9W	3.6-20W	4.05-20.25W	4.5-20W	4.95-20.35W	5.4-20.4W	
	DIP switch	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	⬆⬆⬆⬆	
	Output current	650mA	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	
	Output voltage	9-31V	9-29V	9-27V	9-25V	9-24V	9-22V	9-21V	9-20V	
	Output power	5.85-20.15W	6.3-20.3W	6.75-20.25W	7.2-20W	7.65-20.4W	8.1-19.8W	8.55-19.95W	9-20W	

Protection

- Over temp. protection: Intelligently adjusting or turning off the output current if the PCB temperature ≥ 110°C, auto recovers.
- Over load protection: Shut down the output when current load ≥ 102%, auto recovers.
- Short circuit protection: Shut down automatically if short circuit occurs, auto recovers.
- Over voltage protection: Output current declined when over non-load voltage, auto recovers.

Others

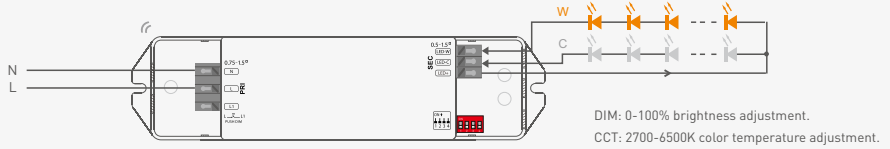
Dimension: 167×41×32mm(L×W×H)
 Packing: 168×43×35mm(L×W×H)
 Weight(G.W.): 160g±10g

Safety & EMC

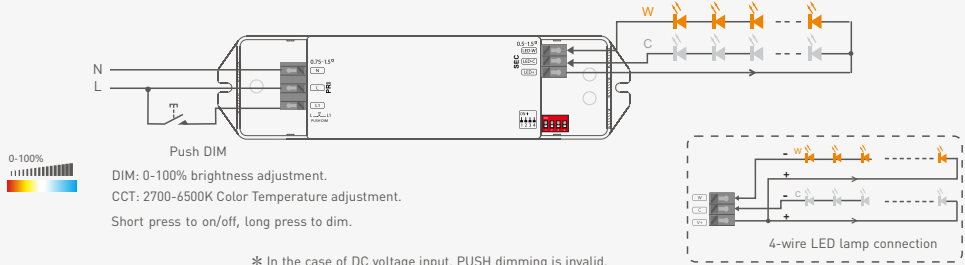
Withstand voltage: I/P-O/P: 3750Vac
 Isolation resistance: I/P-O/P: 100MΩ/500VDC/25°C/70%RH
 Safety standards: IEC/EN61347-1, IEC/EN61347-2-13
 EMC emission: EN55015, EN61000-3-2 Class C, IEC61000-3-3
 EMC immunity: EN61000-4-2,3,4,5,6,8,11, EN61547
 Strobe test standard: IEEE 1789

Wiring diagram

RF connection



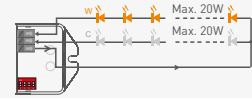
Push DIM connection



* In the case of DC voltage input, PUSH dimming is invalid.

* Dimming interface priority: First RF, next Push DIM.

* Adopting constant program design, it keeps the same brightness in color temperature dimming, twice the rated power load can be connected.
20W driver, 25W × 2CH load can be connected, the total power of the 2 channels will be kept in 20W.



Push DIM/CCT

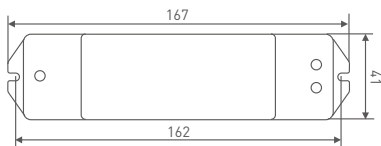


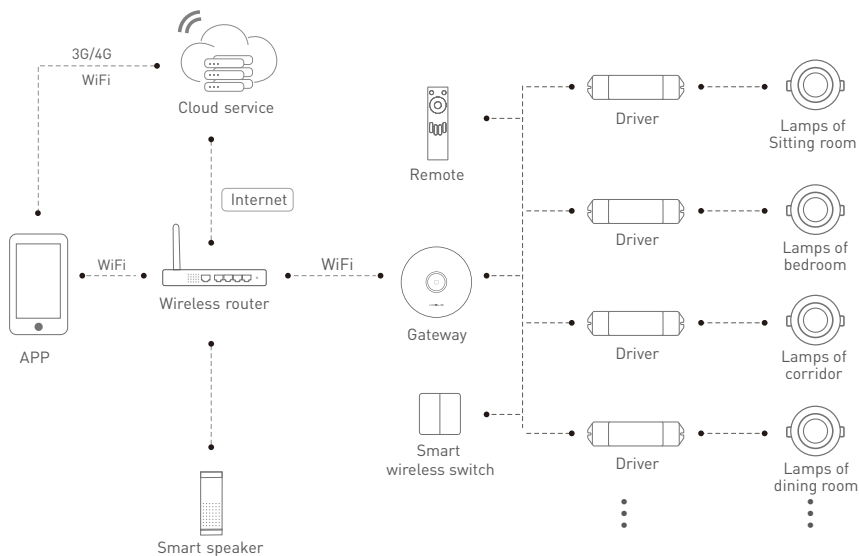
Reset switch

- On/off control: Short press.
- Stepless DIM/CT: Long press.
- With every other long press, the brightness goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

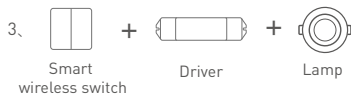
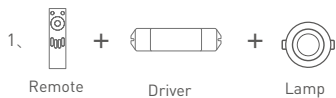
Dimensions

Unit: mm





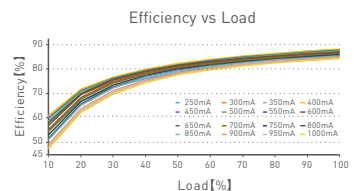
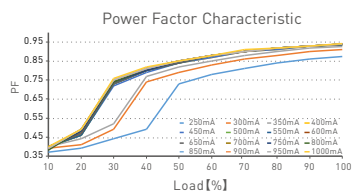
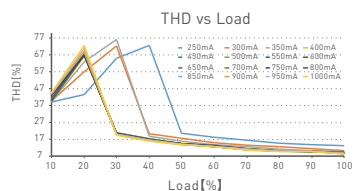
Multi control combination



Other operating methods

When the driver works with remote control, gateway, intelligent wireless switch etc., please refer to the manual of the corresponding product for usage.

Relationship diagrams



Flicker Test Form

IEEE 1789

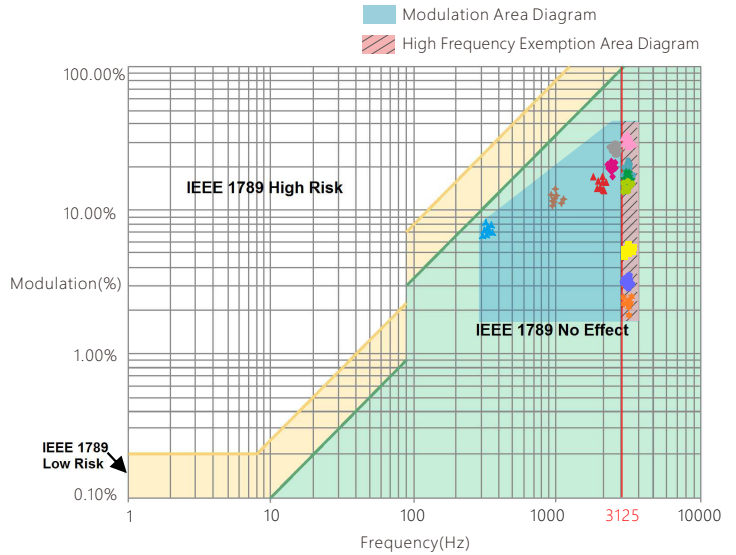
Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$(0.08/2.5) \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ▲ 0.1%
- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%

Marks in the right chart were tested results of different current ranges.

The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.



No further notice if any changes in the manual.
Product function depends on the goods.
* Please feel free to contact your supplier if any question.