SE-20-250-1000-W2A2





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

Tunable White

LED Intelligent CT Driver

- Dimming interface: 0-10V (1-10V/10VPWM/RX), Push DIM
- T-PWM[™] digital dimming,present a perfect visual experience.
- With soft-on and fade in function, visual more comfortable.
- Achieve dimming or CT adjustment for 1CH 0-10V or 2CH 0-10V.
- Dimming range: 0~100%, LED start at 0.1% possible.
- Automatic recognition of 0-10V, 1-10V input signal.
- DIP switch for 16 optional currents' quick selection.
- 0-100% flicker-free, High frequency exemption level.
- Ultra-low consumption of 0-10V ports: < 0.05mA.
- In line with the EU energy efficiency ERP directive, standby power consumption < 0.5W.
- Innovative thermal management technology, intelligent power life protection.
- Over temp. / Over voltage / Over load / Short circuit protection, recover automatically.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Suitable for internal lights application for I/II/III.
- Up to 50000-hour life time.
- 5 years warranty (Rubycon capacitor).





T-PWM

Flicker-free

IFFF 1789

Dimmable:

0.1%-100%

Super depth dimming technology







0-10V

1-10V

PWM

Push DIM

RX



5 in 1 dimming



















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Main characteristics

Dimming interface: 0-10V(1-10V/PWM/RX), Push DIM

Interface consumption: <0.05mA @ 0-10V

Input voltage: 100-240Vac (120-300Vdc)

Frequency: 50/60Hz

Input current: 115Vac≤0.25A, 230Vac≤0.13A

Power factor: PF>0.95/115Vac, PF>0.90/230Vac, at full load

THD 230Vac@THD≤10%, at full load

Efficiency: 83% < 0.5W Standby power loss:

Inrush current(typ.): Cold start 10A at 230Vac (twidth=40µs measured at 50% Ipeak)

Anti surge: I-N·2kV Leakage current: <0.24mA/230Vac

9-54Vdc Output voltage:

Max output voltage: 59Vdc

No video flicker / High frequency exemption Strobe level:

level.

0~100%, 0.1% dimming depth. Dimming range:

LF current ripple(<120Hz): <1% ±5% Current accuracy: ≤2V Ripple & Noise: PWM dimming frequency: ≤3600Hz

Working temperature: ta: -20 ~ 50°C tc: 75°C 20 ~ 95%RH, non-condensing Working humidity: -40 ~ 80°C, 10~95%RH Storage temp., humidity: Temp. coefficient: ±0.03%/°C(0-50°C)

10~500Hz, 2G 12min./1cycle, period for 72min. Vibration:

each along X, Y, Z axes.

Protection

Intelligently adjusting or turning off the output current if the PCB temperature $\geqslant 110^{\circ}\text{C}$, auto recovers. Over temp. protection:

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

Shut down the output if no load, auto recovers. Non-load Protection

Safety & EMC

Withstand voltage: I/P-0/P: 3750Vac

Isolation resistance: I/P-0/P: $100M\Omega/500VDC/25^{\circ}C/70^{\circ}RH$ 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

IEEE 1789 Strobe test standard:

Others

Dimension: 167×41×32mm(L×W×H) Packing: 168×43×35mm(L×W×H)

Weight(G.W.): 160g±10g





LED Current Selection

DIP switch for 16 optional currents' quick selection(see the table below).

Choose current via DIP switch

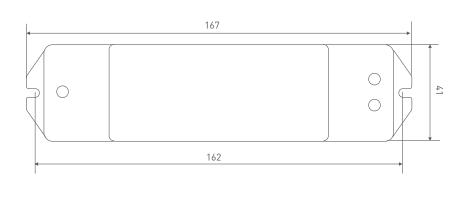


SE-20-250-1000-W2A2	DIP switch	1111	1117	1171	1177	1711	TTTT	1111	1777	
	Output current	250mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	
	Output voltage	9-54V	9-54V	9-54V	9-50V	9-45V	9-40V	9-37V	9-34V	
	Output power	2.25-13.5W	2.7-16.2W	3.15-18.9W	3.6-20W	4.05-20.25W	4.5-20W	4.95-20.35W	5.4-20.4W	ON
	DIP switch	T111	T 1 1 T	TITI	TATT	T T 1 1	TTAT	TTTL	TTTT	L L
	Output current	650mA	700mA	750mA	800mA	850mA	900mA	950mA	1000mA	OFF
	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	

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

Dimensions

Unit: mm





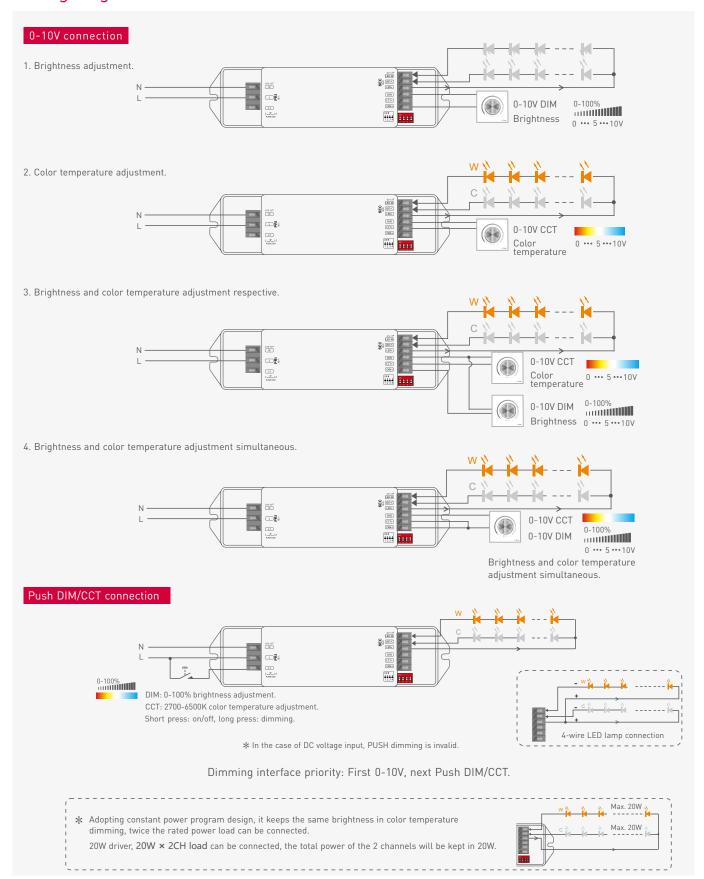
Wiring diagram







Wiring diagram



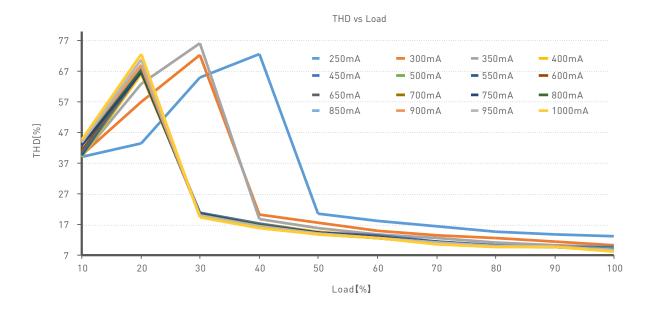
Push DIM/CCT

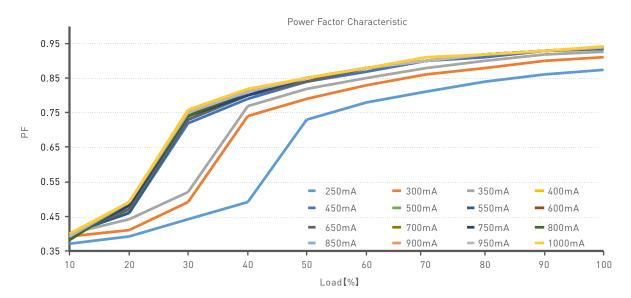


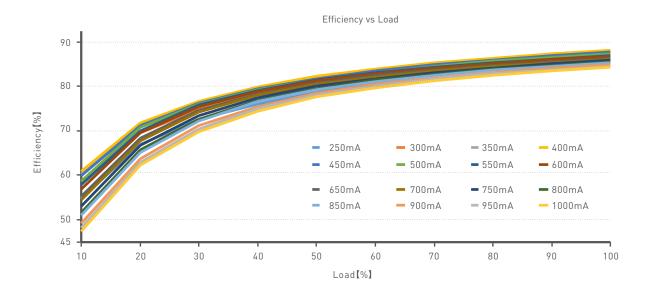
- On/off control: Short press.
- Stepless DIM/CT: Long press.
- With every other long press, the light level goes to the opposite direction.
- $\bullet \ \, \text{Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.}$



Relationship diagrams







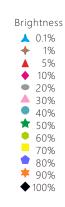


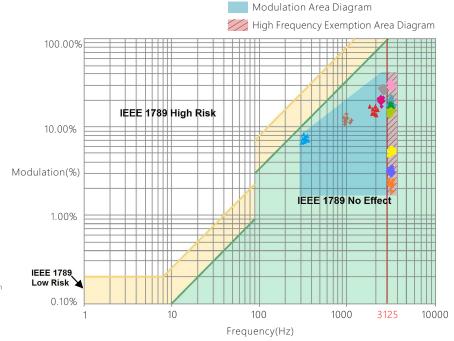


Flicker Test Form



Limit of Modulation in low risk area							
limit (%)							
0.2							
0.025 × f							
0.08 × f							
Exemption assessment							
Limit of Modulation in no effect area							
limit (%)							
0.1							
0.01 × f							
[0.08/2.5]× f							
Exemption assessment (High frequency exemption)							





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

The output frequeny 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.