## LED Intelligent Driver

- Dimming interface: 0-10V (compatible with 1-10V/PWM/RX), Push Dim.
- Built-in high performance MCU, dimming curve can be customized.
- PWM digital dimming, no alter LED color rendering index
- Dimming range: $0 \sim 100 \%$, LED start at $0.1 \%$ possible.
- Multiple current, wide voltage, compatible with a variety of LED lights
- Power factor > 0.99, Efficiency > 89\%.
- Short circuit / Over-heat / Over load protection.
- Non-load output voltage OV to prevent damages to LED caused by poor contact.
- Class 2 power supply. Full protective plastic housing.

- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor environments.


SELV


## Main Characteristics

Dimming Interface: $\quad 0-10 \mathrm{~V}$ (compatible with 1-10V/PWM/RX), Push Dim
Input Voltage Range: $100-277 \mathrm{Vac} \pm 10 \%$

Frequency:
Input Current:
Power Factor:
THD:
Efficiency:
Inrush Current(typ.): Cold start 20A at 230Vac
Control Surge Capability: L-N: 1kV
Leakage Current: Operating Voltage: Output Power Range: Output Current : Output Voltage : Output Power :
$50 / 60 \mathrm{~Hz}$
$115 \mathrm{Vac} \leqslant 0.45 \mathrm{~A}, 230 \mathrm{Vac} \leqslant 0.25 \mathrm{~A}$
PF $>0.99 / 115 \mathrm{Vac}, \mathrm{PF}>0.95 / 230 \mathrm{Vac}$, at full load
$\leqslant 16 \%$ at $115 \mathrm{Vac}, \leqslant 20 \%$ at 230 Vac , at full load
>89\%
$<0.5 \mathrm{~mA} / 230 \mathrm{Vac}$
$10-54 \mathrm{Vdc}$
2W~36W

| 200 mA | 350 mA | 500 mA | 600 mA |
| :---: | :---: | :---: | :---: |
| $10-54 \mathrm{~V}$ | $10-54 \mathrm{~V}$ | $10-54 \mathrm{~V}$ | $10-54 \mathrm{~V}$ |
| $2 \mathrm{~W}-10.8 \mathrm{~W}$ | $3.5 \mathrm{~W}-18.9 \mathrm{~W}$ | $5 \mathrm{~W}-27 \mathrm{~W}$ | $6 \mathrm{~W}-32.4 \mathrm{~W}$ |

## Protection

Over-heat Protection:
Shut down the output when PCB temp. $\geqslant 110^{\circ} \mathrm{C}$, auto recovers when temp. back to normal.

Over Load Protection: Shut down the output when rated power $\geqslant 102 \%$ $\sim 125 \%$, auto recovers when the load is reduced.

Short Circuit Protection: Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed.

## Dimensions



Current Accuracy:
$\pm 3 \%$
Max. Output Voltage: $\quad 58 \mathrm{Vdc}$
No Load Output Voltage:
Dimming Range:
PWM Frequency
Working Temperature
Working Humidity:
Storage Temp., Humidity:
Temp. Coefficient:
Vibration:

OVdc
0~100\%, LED start at 0.1\% possible. $\leqslant 4 \mathrm{KHz}$
tc: $75^{\circ} \mathrm{C}$ ta: $-30^{\circ} \mathrm{C} \sim 55^{\circ} \mathrm{C}$
$20 \sim 95 \% R H$, non-condensing
$-40 \sim 80^{\circ} \mathrm{C}, 10 \sim 95 \% \mathrm{RH}$
$\pm 0.03 \% /{ }^{\circ} \mathrm{C}\left(0-50^{\circ} \mathrm{C}\right)$
$10 \sim 500 \mathrm{~Hz}, 2 \mathrm{G} 12 \mathrm{~min} . / 1$ cycle, period for 72 min . each along $X, Y, Z$ axes

| 700 mA | 900 mA | 1050 mA | 1200 mA |
| :---: | :---: | :---: | :---: |
| $10-52 \mathrm{~V}$ | $10-40 \mathrm{~V}$ | $10-35 \mathrm{~V}$ | $10-30 \mathrm{~V}$ |
| $7 \mathrm{~W}-36.4 \mathrm{~W}$ | $9-36 \mathrm{~W}$ | $10.5-36.75 \mathrm{~W}$ | $12-36 \mathrm{~W}$ |

## Safety \& EMC

Withstand Voltage: Isolation Resistance:

Safety Standards:
EMC Emission:
EMC Immunity:

## Others

| Dimension: | $175 \times 44 \times 30 \mathrm{~mm}(L \times W \times H)$ |
| :--- | :--- |
| Packing: | $178 \times 48 \times 33 \mathrm{~mm}(L \times W \times H)$ |
| Weight(G.W.): | $175 \mathrm{~g} \pm 10 \mathrm{~g}$ |

I/P-O/P: 3750Vac
I/P-0/P: $100 \mathrm{M} \boldsymbol{\Omega} / 500 \mathrm{VDC} / 25^{\circ} \mathrm{C} / 70 \% \mathrm{RH}$
IEC/EN61347-1, IEC/EN61347-2-13
EN55015, EN61000-3-2 Class C, IEC61000-3-3
EN61000-4-2,3,4,5,6,8,11 EN61547



The dimming interface priority：first $0-10 \mathrm{~V}$ ，next Push Dim．

## Push Dimming


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

Reset Switch

## LED Current Selection

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

| ＋14 | DIM <br> ++1 <br> +8 | ISET $+1-1$ | LED <br> $+1-$ | 】 】 】 | ■ $\dagger$ | ■ $\dagger$ ■ | 」†阤 | 甲 】 | 甲 ¢ | 甲 $\dagger$ | 甲甲 | 「 | － |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 708 | 빈 |  | ［17］ | 200 mA | 350 mA | 500 mA | 600 mA | 700 mA | 900 mA | 1050 mA | 1200 mA | ON | OFF |
|  | 38 | 38 | 83 | 10－54V | 10－54V | 10－54V | $10-54 \mathrm{~V}$ | 10－52V | 10－40V | 10－35V | 10－30V |  |  |

＊After current setting by DIP switch，power off and then power on to make the new current effective．
＊E．g．LED $3.2 \mathrm{~V} / \mathrm{pcs}$ ：10－54V can power 3－16pcs LEDs in series， $10-30 \mathrm{~V}$ can power $3-9 \mathrm{pcs}$ LEDs，the max quantity of LEDs in series will be subject to the actual voltage of LED．

Advanced options：connect ISET port with resistors of different values to set up any current from 200 mA to 1200 mA ． （specific resistor values refer to the table）．


