## TR-9-150-500-G1T LED Intelligent Driver

- Support Triac leading edge, ELV trailing edge phase-cut dimming
- Super small size, can be built-in the guide rail shooting light.
- T-PWM<sup>™</sup> digital dimming, present a perfect visual experience.
- Dimming range: 0~100%, LED start dimming from < 0.1%.
- Flicker-free (IEEE-PAR 1789), achieve the level of exemption assessment.
- Innovative thermal management technology, intelligent power life protection .
- Multi-current & wide voltage, suitable for different power LED.

T-PWM

Super depth

dimming technology

• Over load / Over-heat / Short circuit / Over voltage protection, recover automatically.

Flicker-free

IEEE-1789

- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for I/II/III



1.35~9W 150~500mA 9~36Vdc



## Specification

Triac

ELV

## Output

| Output                     | Ir                                       | Input   |
|----------------------------|--|---|
| Output Voltage:            | 9-36Vdc D                                | Dimming Interface: Triac leading edge / ELV trailing edge                           |
| Max Output Voltage:        | 40Vdc Ir                                 | Input Voltage Range: 200-240Vac   |
| Output Current:            | 150-500mA F                              | Frequency: 50/60Hz  |
| Output Power Range:        | 1.35W~9W                                 | Input Current: 0.11A@230Vac   |
| Fluctuation Level:         | Exemption assessment level               | Efficiency (typ.): 80%  |
| Dimming Range:             | 0.100% dimming depths <0.1%              | Inrush Current(typ.): Cold start 25A at 230Vac (twidth=240µs measured at 50% lpeak) |
| PWM Frequency:             | < 3400z                                  | Control surge capability: L-N: 1kV  |
| LF current ripple(<120Hz): | <2%                                      | Leakage Current: <0.5mA/230Vac  |
| Current Accuracy:          | ±5%                                      | Leakage current: <0.5mA/230Vac  |
| Output Current:            | 150mA 200mA 250mA 300mA 350n             | mA 400mA 450mA 500mA  |
| Output Voltage:            | 9-36V 9-36V 9-36V 9-30V 9-26             | 26V 9-22.5V 9-20V 9-18V   |
| Output Power:              | 1.35-5.4W 1.8-7.2W 2.25-9W 2.7-9W 3.15-9 | 9.1W 3.6-9W 4.05-9W 4.5-9W  |
|                            |  |   |

| Protection                |   | Safety & Emc          |   |  |  |  |
|---------------------------|---|-----------------------|---|--|--|--|
| Over-heat Protection:     | Intelligently adjusting or turning off the output current if the PCB temperature $\geq$ 110°C. auto recovers. | Withstand Voltage:    | I/P-0/P: 3750Vac                          |  |  |  |
|                           |   | Isolation Resistance: | I/P-0/P: 100M $\Omega$ /500VDC/25°C/70%RH |  |  |  |
| Over Load Protection:     | Power limit when Max. power loaded≥108%, auto recovers.   | Safety Standards:     | IEC/EN61347-1, IEC/EN61347-2-13           |  |  |  |
| Short Circuit Protection: | Shut down automatically if short circuit occurs, auto recovers.   | Strobe Test Standard: | IEEE-PAR 1789                             |  |  |  |
| Over Voltage Protection:  | Protection start if exceed non load voltage value, auto recovers.   |                       |   |  |  |  |

#### Others

| Dimension:    | 80×35×23mm(L×W×H) |
|---------------|-------------------|
| Packing:      | 93×43×27mm(L×W×H) |
| Weight(G.W.): | 75g±10g           |

#### Environment

| Working Temperature:     | ta: -20°C ~ 50°C tc: 85°C   |
|--------------------------|---|
| Working Humidity:        | 20 ~ 95%RH, non-condensing  |
| Storage Temp., Humidity: | -40°C ~ 80°C, 10~95%RH  |
| Temp. Coefficient:       | ±0.03%/°C (0-50°C)  |
| Vibration:               | 10~500Hz, 2G 12min./1cycle, period for 72min.<br>each along X, Y, Z axes. |



# Triac/ELV

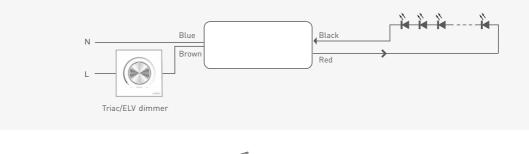
## Dimensions

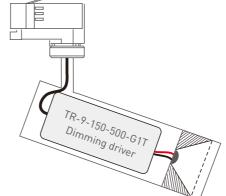
Unit : mm





### Connections





## **LED** Current Selection

Remove the housing, find the following DIP switch, 8 optional currents' quick selection as the table.

|     | DIP switch     | 111   | 117.  | 171   | ATT.  | TII.  | T 4 T   | TT4   | TTT   | Ŧ  |     |
|-----|----------------|-------|-------|-------|-------|-------|---------|-------|-------|----|-----|
| 2 3 | Output Current | 150mA | 200mA | 250mA | 300mA | 350mA | 400mA   | 450mA | 500mA | ON | OFF |
|     | Output Voltage | 9-36V | 9-36V | 9-36V | 9-30V | 9-26V | 9-22.5V | 9-20V | 9-18V |    |     |

\* After current setting by DIP switch, power off and then power on to make the new current effective.

\* E.g. LED 3V/pcs: 9-36V can power 3-12pcs LEDs in series, 9-18V can power 3-6pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.