LTECH

LED Intelligent Driver

**0-10V**

- Dimming interface: 0-10V (1-10V/10VPWM/RX).
- Automatic recognition of 0-10V, 1-10V input signal.
- T-PWM ™digital dimming, present a perfect visual experience.
- 0-100% flicker-free,High frequency exemption level.
- Innovative thermal management technology, intelligent power life protection.
- Dimming range: 0~100%, LED start at 0.01% possible.
- With soft-on and fade in function, visual more comfortable.
- Over load / Short circuit / Over-heat protection, recover automatically.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for Ⅰ/Ⅱ/Ⅲ.
- Up to 30000-hour life time

**T-PWM™**
Super depth dimming technology

**Flicker-free**
IEEE 1789

Dimmable:
0.01~100%

4 in 1 DIM
0-10V
1-10V
10V PWM
RX

Ultra-low consumption of 0-10V ports: < 0.05mA

SELV RoHS

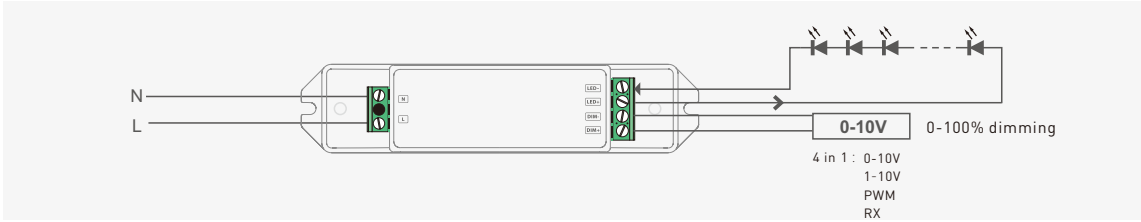
Model:CC-10W IS15885 (Part2/Sec13) R-41129631

0-10V | T-PWM Super depth dimming technology | Flicker-free IEEE 1789 | Short Circuit Protection | Over Load Protection | Over-heat Protection | Multiple Current

## Specification

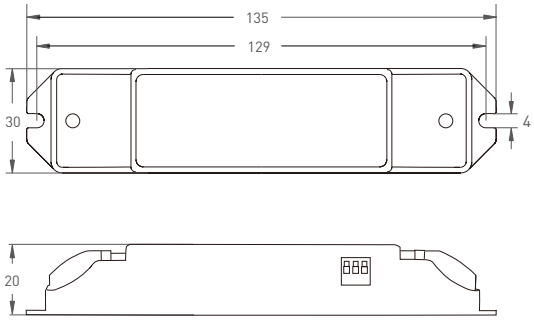
| Model | | AD-10-100-400-G1A | AD-10-350-700-G1A |
|---|---|---|---|
| OUTPUT | Output Voltage | 10-42Vdc | 10-24Vdc |
| | Max Output Voltage | 47Vdc | 26Vdc |
| | Output Current | 100-400mA | 350-700mA |
| | Output Power Range | 1W~10W | 3.5W~10W |
| | Strobe Level | No video flicker / High frequency exemption level. | |
| | Dimming Range | 0~100%, 0.01% dimming depth. | |
| | PWM Dimming Frequency | ≤3600Hz | |
| | LF current ripple(<120Hz) | <1% | |
| | Current Accuracy | ±5% | |
| INPUT | Dimming Interface | 0-10V(1-10V/10VPWM/RX) | |
| | Input Voltage | 220-240Vac | |
| | Frequency | 50/60Hz | |
| | Input Current | 230Vac≤0.12A | |
| | Efficiency | 80% | 79% |
| | Inrush Current(typ.) | Cold start 50A at 230Vac (twidth=75μs measured at 50% Ipeak) | |
| | Anti Surge | L-N: 1kV | |
| | Leakage Current | <0.5mA/230Vac | |
| ENVIRONMENT | Working Temperature | ta: -20°C ~ 50°C tc: 80°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. | |
| PROTECTION | Over Load Protection | When O/P voltage exceed its range, O/P current declines, auto recovers. | |
| | Over-heat Protection | Intelligently adjusting or turning off the output current if the PCB temperature ⩾110°C, auto recovers. | |
| | Short Circuit Protection | Shut down automatically if short circuit occurs, auto recovers. | |
| 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 | |
| | Strobe Test Standard | IEEE 1789 | |
| OTHERS | Dimension | 135×30×20mm(L×W×H) | |
| | Packing | 140×34×23mm(L×W×H) | |
| | Weight(G.W.) | 80g±10g | |

## Wiring Diagram




## Dimensions

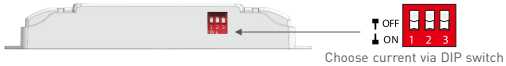
Unit : mm




## LED Current Selection

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

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




Choose current via DIP switch

| DIP Switch | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AD-10-100-400-G1A | Output Current | 100mA | 150mA | 200mA | 250mA | 300mA | 350mA | 400mA | ON OFF |
| | Output Voltage | 10-42V | 10-42V | 10-42V | 10-40V | 10-33V | 10-28V | 10-25V | |
| | Output Power | 1-4.2W | 1.5-6.3W | 2-8.4W | 2.5-10W | 3-9.9W | 3.5-9.8W | 4-10W | |

| DIP Switch | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AD-10-350-700-G1A | Output Current | 350mA | 400mA | 450mA | 500mA | 550mA | 600mA | 650mA | 700mA | ON OFF |
| | Output Voltage | 10-24V | 10-24V | 10-22V | 10-20V | 10-18V | 10-16V | 10-15V | 10-14V | |
| | Output Power | 3.5-8.4W | 4-9.6W | 4.5-9.9W | 5-10W | 5.5-9.9W | 6-9.6W | 6.5-9.75W | 7-9.8W | |

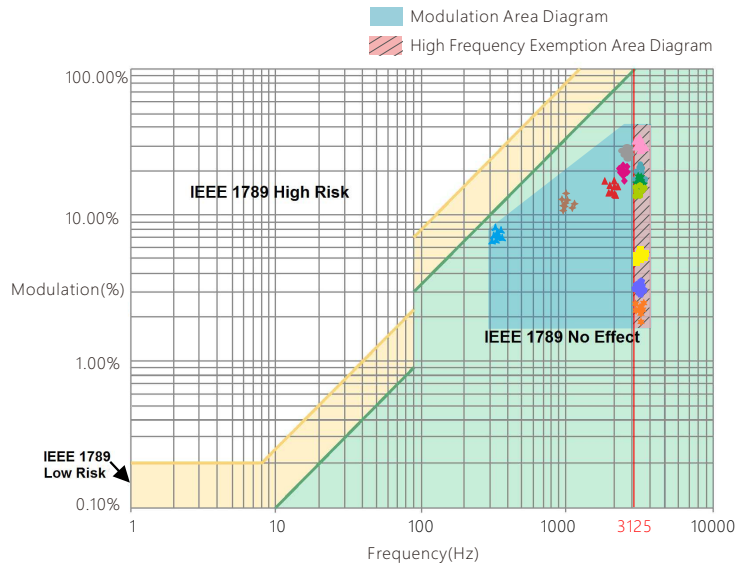
## Flicker Test Form

IEEE 1789

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