

5 in 1 dimming
0-10V
1-10V
10V PWM
TRIAC DIM
Resistance DIM

LED Intelligent Driver (CV)

100-277V Dimming

PF>0.95

THD<10%

- TRIAC / 0-10V/1-10V/10V PWM/RESISTANCE DIM
- With soft-on and fade in function, visual more comfortable.
- Dimming range: 0~100%, LED start at 1% possible.
- 0-100% flicker-free, High frequency exemption level.
- High Efficient driver: efficiency 90%,PF>0.95, THD<10%
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Suitable for internal lights application for I / II / III.
- Up to 50000-hour life time.



Flicker-free
IEEE 1789
High frequency exemption level



0-10V
1-10V
DIM

Triac/
Resistance
DIM

PWM
Digital
Dimming

Over-heat
Protection

Short Circuit
Protection

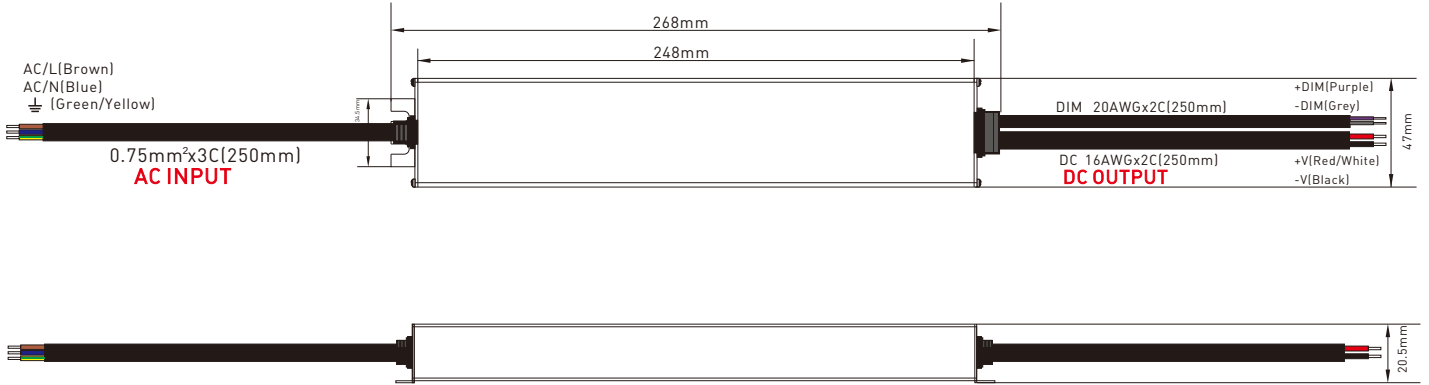
Over Load
Protection

Over voltage
protection

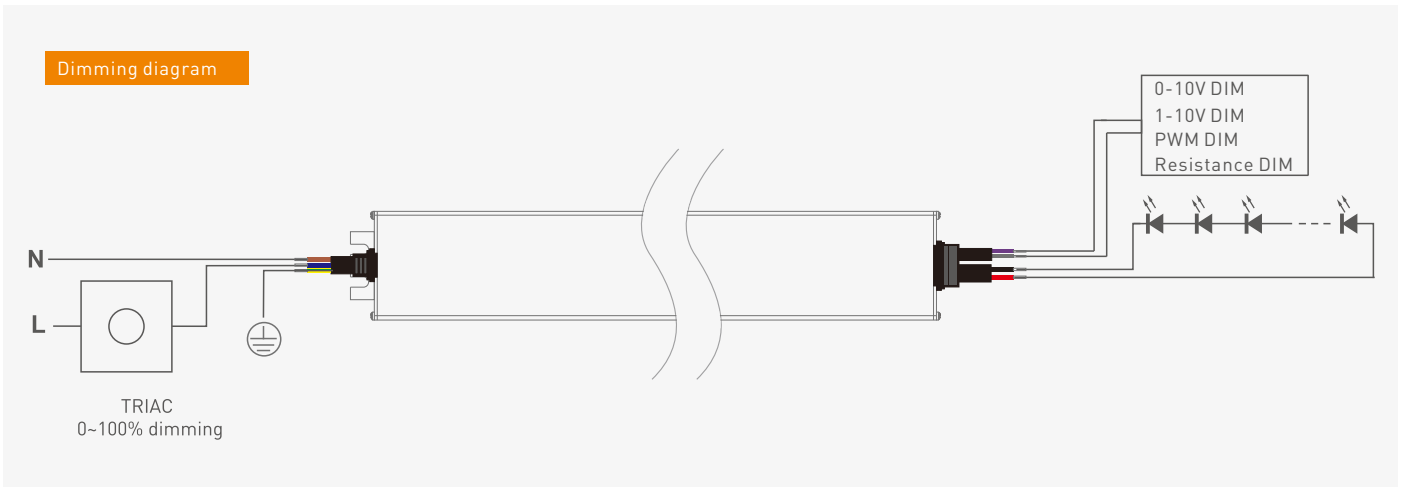
Specification

| Model | YSD-150WUGF-12TL | | YSD-150WUGF-24TL | |
|--------------|--------------------------|---|---|--------------|
| OUTPUT | Output voltage | 12VDC | | 24VDC |
| | Output voltage range | 12VDC±0.3VDC | | 24VDC±0.6VDC |
| | Output current | Max 12.5A | | Max 6.25A |
| | Output power | Max 150W | | |
| | Output power range | 0~150W | | |
| | With or without strobe | No strobe | | |
| | Dimming range | 0~100%, dimming depth: Max. 1% | | |
| | Ripple & Noise | ≤200mV | ≤400mV | |
| | PWM frequency | 3500Hz | | |
| INPUT | Dimming interface | TRIAC / 0-10V/1-10V/10V PWM/RESISTANCE DIM | | |
| | Input voltage | 100-277Vac | | |
| | Frequency | 50/60Hz | | |
| | Input current | 1.78~0.63A | | |
| | Power factor | PF>0.95/230Vac, at full load | | |
| | THD | ≤10% at 230Vac, at full load | | |
| | Efficiency (typ.) | 90% | 91% | |
| | Inrush current(typ.) | Cold start 50A at 230Vac | | |
| | Control surge capability | L-N:2KV | | |
| | Leakage current | Max. 0.5mA | | |
| ENVIRONMENT | Working temperature | ta: -30°C ~ 50°C tc: 80°C | | |
| | Working humidity | 20 ~ 95%RH, non-condensing | | |
| | Storage temp., humidity | -40°C ~ 80°C, 10~95%RH | | |
| | Vibration | 10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes. | | |
| PROTECTION | Overtemperature | Protection type: Shut down o/p voltage, re--power on to recover | | |
| | Over voltage protection | Shut down the output when non-load voltage ≥13V, re-power on to recover after fault condition is removed. | Shut down the output when non-load voltage ≥26V, re-power on to recover after fault condition is removed. | |
| | Over load protection | Shut down the output when current load ≥110%, auto recovers. | | |
| | Short circuit protection | Protection type: 1. When the first-level short-circuit protection is triggered, the fault can be automatically recovered; 2. When the second-level short-circuit protection is triggered, the power needs to be turned on again after the fault is eliminated | | |
| 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 | | |

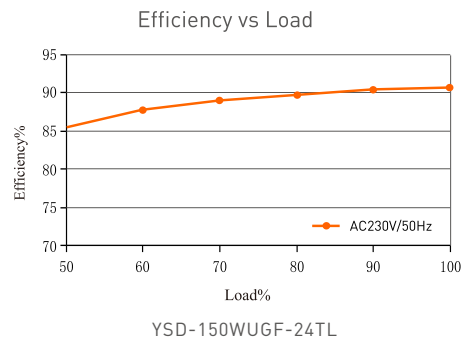
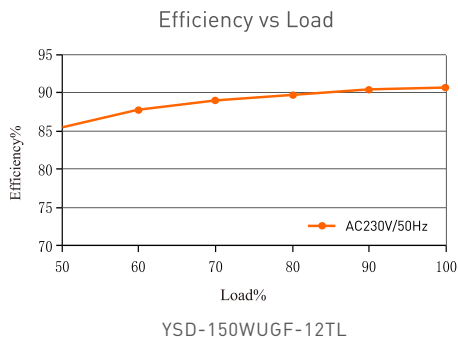
Dimensions
 Unit:mm



Wiring diagram



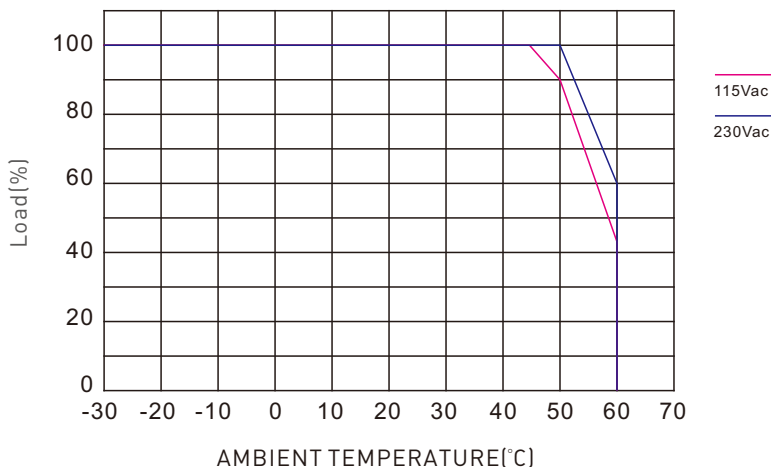
Relationship diagrams



Packaging Information

| | |
|-----------------|----------------------|
| DIMENSION | 268x47x20.5mm(LxWxH) |
| PACKING | 293x58x24mm(LxWxH) |
| CARTON QUANTITY | |
| CARTON SIZE | |
| WEIGHT | 460g±10g/PCS |

Temperature load curve



Flicker Test Form

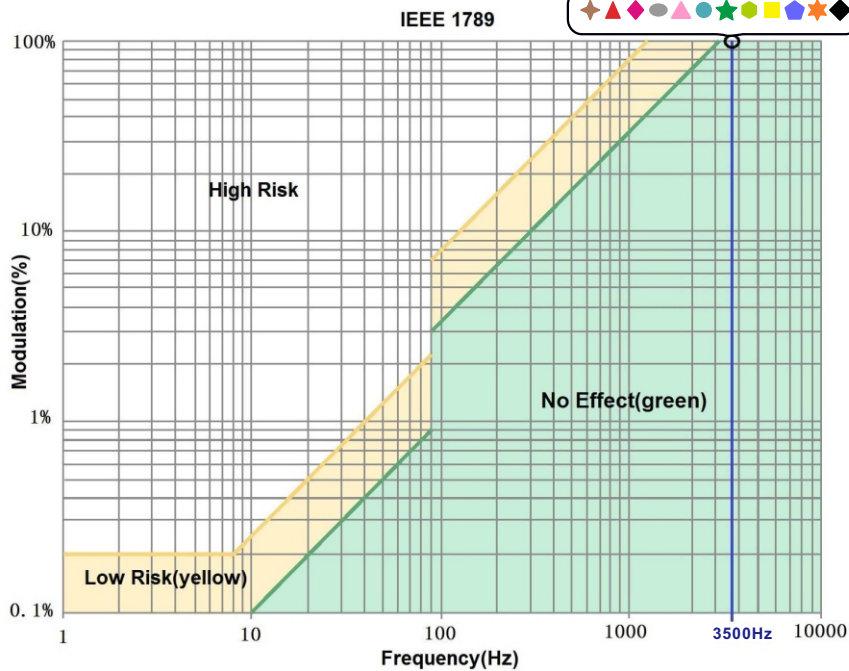
IEEE 1789

| 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

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

Exemption assessment
(High frequency exemption)



* 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.

5 in 1 dimming
0-10V
1-10V
10V PWM
TRIAC DIM
Resistance DIM

100-277V Dimming

PF>0.95

THD<10%

LED 智能调光驱动器 (恒压型)

- 可控硅/0-10V/1-10V/10V PWM/电阻 DIM
- 带软启动渐亮功能, 让人眼视觉更舒适.
- 调光范围: 0-100%, LED 从 1% 开始调光.
- 0-100% 全程无频闪, 高频豁免考核级别.
- 高效能电源: 效率90%, PF>0.95, THD<10%.
- 过载、过温、短路、过压保护.
- 适合室内 I / II / III 类灯具使用.
- 高达50000小时的额定寿命.



无频闪
IEEE 1789
高频豁免考核级别



SELV IP67



0-10V
1-10V
DIM

可控硅/
电阻
DIM

PWM
数字调光

过温保护

短路保护

过载保护

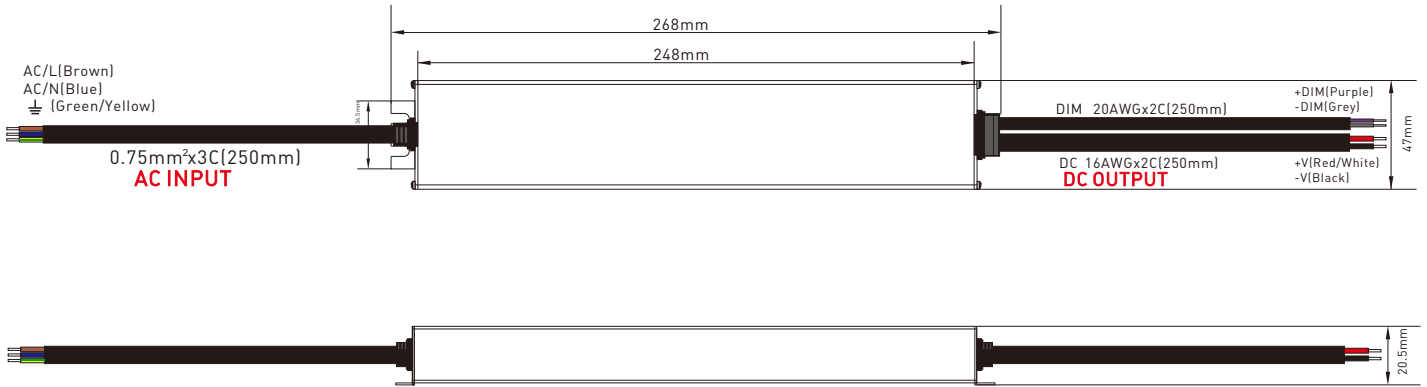
过压保护

技术参数

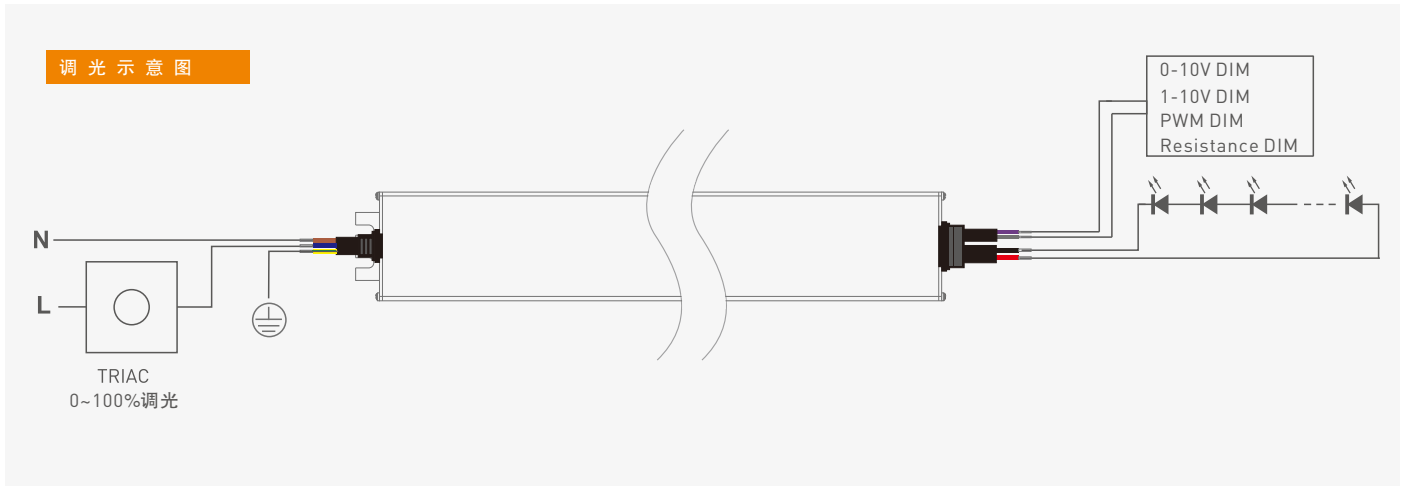
| 型号 | YSD-150WUGF-12TL | YSD-150WUGF-24TL | |
|----------|------------------|---|--------------------------|
| 输出 | 输出电压 | 12VDC | 24VDC |
| | 输出电压范围 | 12VDC±0.3VDC | 24VDC±0.6VDC |
| | 输出电流 | Max 12.5A | Max 6.25A |
| | 输出功率 | Max 150W | |
| | 输出功率范围 | 0~150W | |
| | 是否频闪 | 无频闪 | |
| | 调光范围 | 0-100%, 调光深度: 1% | |
| | 纹波和噪音 | ≤200mV | ≤400mV |
| PWM 调光频率 | 3500Hz | | |
| 输入 | 调光接口 | TRIAC/0-10V/1-10V/10V PWM/电阻 DIM | |
| | 输入电压 | 100-277Vac | |
| | 频率范围 | 50/60Hz | |
| | 输入电流 | 1.78~0.63A | |
| | 功率因素 | PF>0.95/230Vac, 满载 | |
| | 谐波THD | ≤10% at 230Vac, 满载 | |
| | 效率[typ.] | 90% | 91% |
| | 浪涌电流[typ.] | 冷启动50A at 230Vac | |
| | 抗浪涌 | L-N:2KV | |
| | 漏电流 | Max. 0.5mA | |
| 环境 | 工作温度 | ta: -30°C ~ 50°C tc: 80°C | |
| | 工作湿度 | 20 ~ 95%RH, 无冷凝 | |
| | 储存温度 湿度 | -40°C ~ 80°C, 10~95%RH | |
| | 耐振动 | 10~500Hz, 2G 12分钟/周期, X, Y, Z轴各72分钟. | |
| 保护 | 过温保护 | 保护类型:关闭输出电压,重新通电恢复 | |
| | 过压保护 | 空载电压≥13V,关闭输出,异常排除后上电恢复 | 空载电压≥26V, 关闭输出,异常排除后上电恢复 |
| | 过载保护 | 负载电流 ≥110%,关闭输出,可自动恢复 | |
| | 短路保护 | 保护类型:1.触发第一级短路保护时,故障消除后可自动回复; 2.触发第二级短路保护时,故障消除后需重新通电恢复. | |
| 安规和电磁规格 | 耐压 | 输入对输出:3750Vac | |
| | 绝缘阻抗 | 输入对输出:100MΩ/500VDC/25°C/70%RH | |
| | 安全规范 | IEC/EN61347-1, IEC/EN61347-2-13 | |
| | 电磁兼容发射 | EN55015, EN61000-3-2 Class C, IEC61000-3-3 | |
| | 电磁兼容抗扰度 | EN61000-4-2,3,4,5,6,8,11 EN61547 | |
| | 频闪测试标准 | IEEE 1789 | |

尺寸图

单位: mm

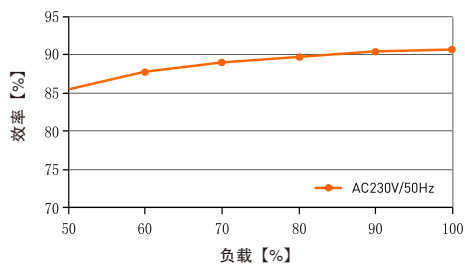


连接应用图



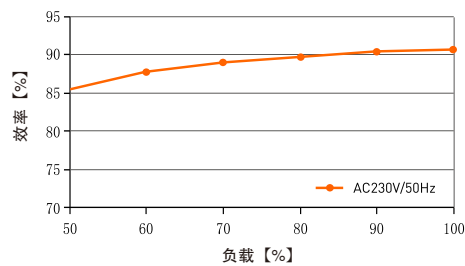
关系图表

效率与负载关系图表



YSD-150WUGF-12TL

效率与负载关系图表

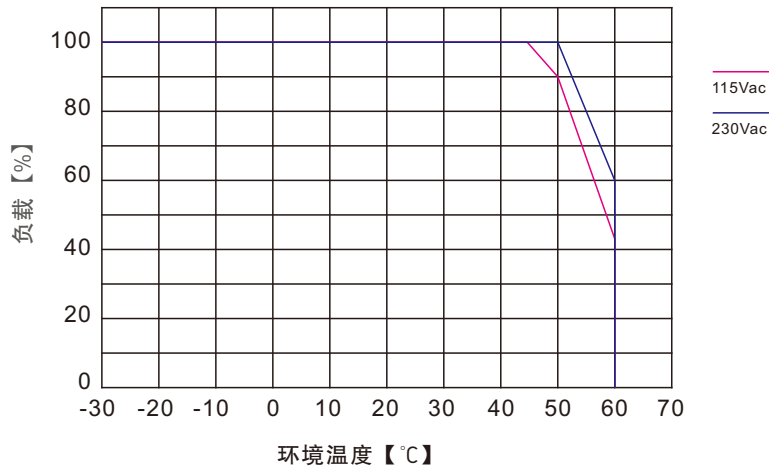


YSD-150WUGF-24TL

包装信息

| | |
|------|----------------------|
| 产品尺寸 | 268x47x20.5mm(LxWxH) |
| 包装尺寸 | 293x58x24mm(LxWxH) |
| 装箱数量 | |
| 外箱尺寸 | |
| 产品重量 | 460g±10g/PCS |

温度负载曲线



频闪测试表

| IEEE 1789 | |
|--------------------------------------|-----------------------|
| 低风险区域(Low Risk)的波动深度(Modulation)限值 | |
| 光输出波形频率 f | 限值[%] |
| $f \leq 8\text{Hz}$ | 0.2 |
| $8\text{Hz} < f \leq 90\text{Hz}$ | $0.025 \times f$ |
| $90\text{Hz} < f \leq 1250\text{Hz}$ | $0.08 \times f$ |
| $f > 1250\text{Hz}$ | 免除考核 |
| 无风险区域(No Effect)的波动深度(Modulation)限值 | |
| 光输出波形频率 f | 限值[%] |
| $f \leq 10\text{Hz}$ | 0.1 |
| $10\text{Hz} < f \leq 90\text{Hz}$ | $0.01 \times f$ |
| $90\text{Hz} < f \leq 3125\text{Hz}$ | $[0.08/2.5] \times f$ |
| $f > 3125\text{Hz}$ | 免除考核(高频豁免) |

亮度

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

