LTSYS

LM-75-24-G1T2
LM-75-12-G1T2

Triac/ELV Push DIM

LED Intelligent Driver (CV)

Flicker-free
IEEE 1789
High frequency exemption level

Dimmable:
0.1%-100%

- Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM.
- With soft-on and fade in function, visual more comfortable.
- Dimming range: 0~100%, LED start at 0.1% possible.
- 0-100% flicker-free, High frequency exemption level.
- High Efficient driver: efficiency 88%,PF>0.98, THD<6%
- Innovative thermal management technology, intelligent power life protection.
- 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.
- 5 years warranty (Rubycon capacitor).

(The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.)

Triac/ELV Push DIM | PWM Digital Dimming | 0.1 % Dimming Dept | Over Temp. Protection | Short Circuit Protection | Over Load Protection | V Over voltage protection

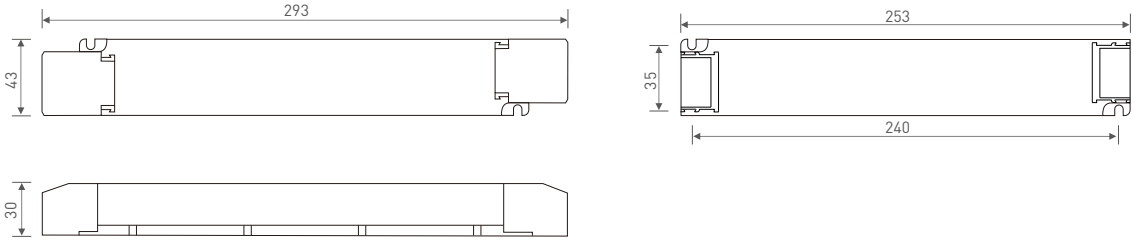
Specification

Model		LM-75-24-G1T2	LM-75-12-G1T2
OUTPUT	Output voltage	24Vdc	12Vdc
	Output voltage range	24Vdc ± 0.5Vdc	12Vdc ± 0.5Vdc
	Output current	Max. 3.125A	Max. 6.25A
	Output power	Max. 75W	
	Output power range	0~75W	
	Strobe level	High frequency exemption level.	
	Dimming range	0~100%, dimming depth: Max. 0.1%	
	Overload power limitation	≥102%	
	Ripple & Noise	≤150mV	
	PWM frequency	3600Hz	
INPUT	Dimming interface	Leading edge (Triac), Trailing edge (ELV) phase-cut and Push DIM.	
	Input voltage	220-240Vac	
	Frequency	50/60Hz	
	Input current	230Vac≤0.4A	
	Power factor	PF>0.98/230Vac , at full load	
	THD	230Vac@THD＜6%, at full load	
	Efficiency (typ.)	88%	87%
	Inrush current(typ.)	Cold start 30A at 230Vac	
	Control surge capability	L-N: 2kV	
	Leakage current	Max. 0.5mA	
ENVIRONMENT	Working temperature	ta: -20 ~ 50°C tc: 90°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. each along X, Y, Z axes.	
PROTECTION	Over-heat protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.	
	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	Shut down the output when non-load voltage≥26V, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage ≥13V, re-power on to recover after fault condition is removed.
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	
OTHERS	Dimension	293×43×30mm(L×W×H)	
	Packing	296×44×33mm(L×W×H)	
	Weight(G.W.)	350g±10g	

* The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccups flickering). When you order, please remark controlling the constant current LED fixture (e.g. MR16 lamp, underground light, LED wall washer, constant current LED strip, etc.), then we can prepare the special programs.

Dimensions

Unit: mm



Wiring diagram

Triac connection

Push DIM connection

Short press to on/off, long press to dim.

✻ Push DIM is invalid for DC voltage input.
Dimming interface priority: First Triac, next Push DIM.

Push dimming

Reset switch

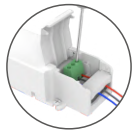
- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the brightness goes to the opposite direction.
- Dimming memory: The lights will return to its previous brightness value when short press on PUSH DIM button.

  Power on again after power cut, the output brightness is subjected to the input voltage of drivers.

Protective Housing Application Diagram

Tension plate

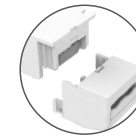
1. Pry up the protecting housing in the side plate position with a tool.



2. Connect to electrical wires with a screwdriver as wiring diagram shows.

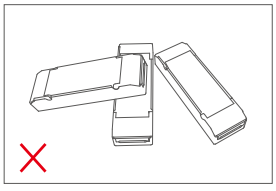
3. Press down the tension plate to fix the the electrical wires, then close the protective housing.

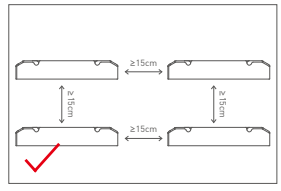
Remove the protective housing



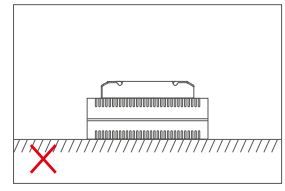
Pull the housing left and right from the bottom to remove it.

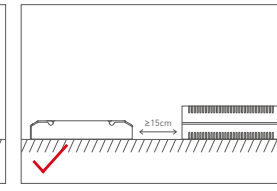
Installation Precautions





Please do not stack the products.The distance between two products should be ≥15cm so as notto affect heat dissipation and the lifespan of the products.

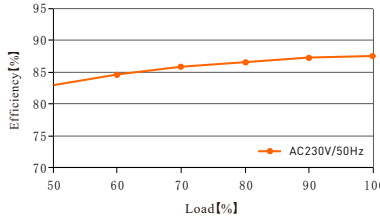




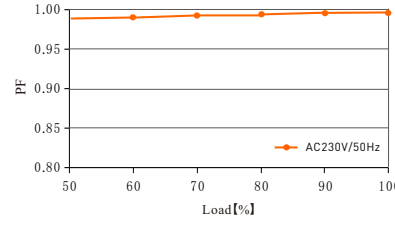
Please not place the products on LED drivers. The distance between the product and the drivershould be ≥15cm so as not to affect heat dissipation and shorten the lifespan of the products.

Relationship diagrams

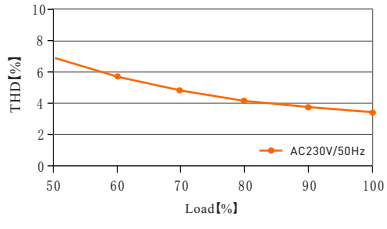
Efficiency vs Load



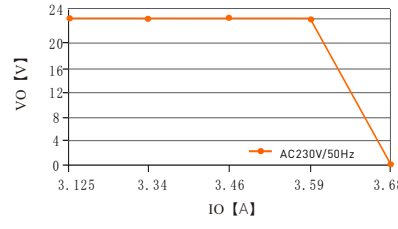
Power Factor Characteristic



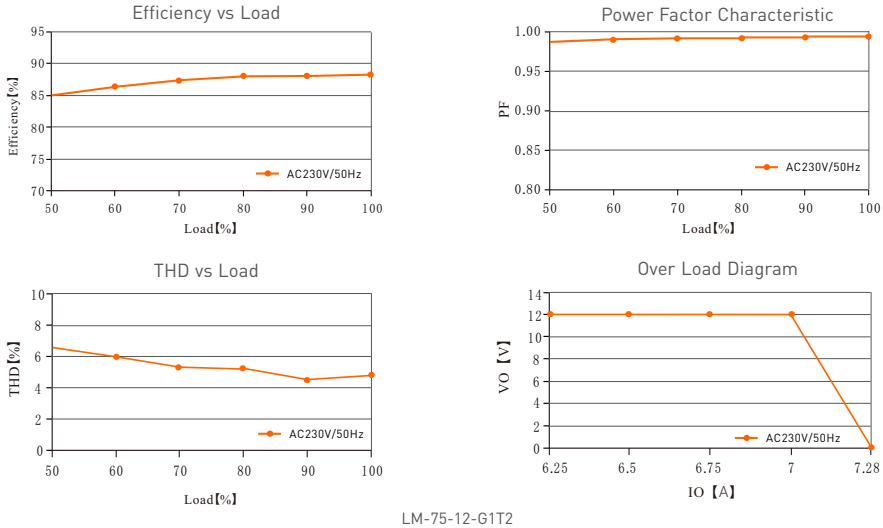
THD vs Load



Over Load Diagram



LM-75-24-G1T2

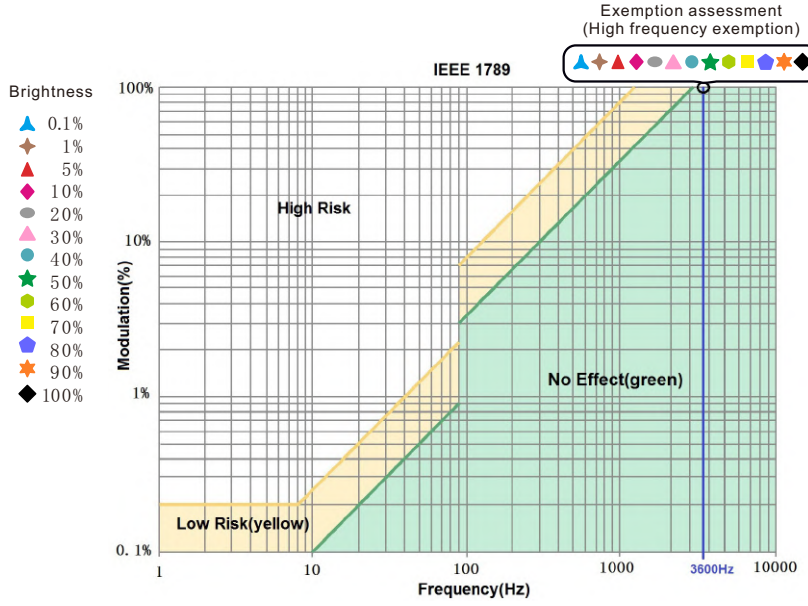


LM-75-12-G1T2

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)



Packaging Specifications

Model	LM-75-24-G1T2/LM-75-12-G1T2
Carton Dimensions	315×230×215mm(L×W×H)
Quantity	10 PCS/Layer; 3 Layers/Carton; 30 PCS/Carton
Weight	0.35 kg/PC; 11.3 kg/Carton

Packaging Image

Inner Packaging Box

Carton Packaging

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be usedonly after they have been qualified.

Attentions

- This product must be installed and adjusted by a qualified professional.
- This product is non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
- Please check whether the working voltage used complies with the parameter requirements of the product.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components,
- or trigger a accident.

If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.

* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- Beyond warranty periods.
- Any artificial damage caused by high voltage, overload, or improper operations.
- Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- Warranty labels and barcodes have been damaged.
- No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

Update Log

Version	Updated Time	Update Content	Updated by
A3	17/03/2022	Updated the silkscreen on the product.	Xushujun
A4	25/10/2025	Replace the logo, update the laser engraving	Shaoyun He

LTSYS

LM-75-24-G1T2
LM-75-12-G1T2

Triac/ELV Push DIM

LED 智能调光驱动器 (恒压型)

- 前沿 (Triac)，后沿(ELV)切相和Push 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0.1%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88%、PF>0.98、THD<6%
- 创新的热管理技术，智能保护电源寿命
- 短路、过温、过载、过压保护, 可自动恢复
- 适合室内Ⅰ、Ⅱ、Ⅲ类灯具应用
- 高达50,000小时的额定寿命
- 质保5年（采用红宝石电容）

无频闪
IEEE 1789
高频豁免考核级别

Dimmable:
0.1%-100%

（认证图标仅代表产品正在进行这一系列的认证申请，认证资质以产品实物为准）

Triac/ELV Push DIM | PWM 数字调光 | 0.1 % 深度调光 | 过温保护 | 短路保护 | 过载保护 | V 过压保护

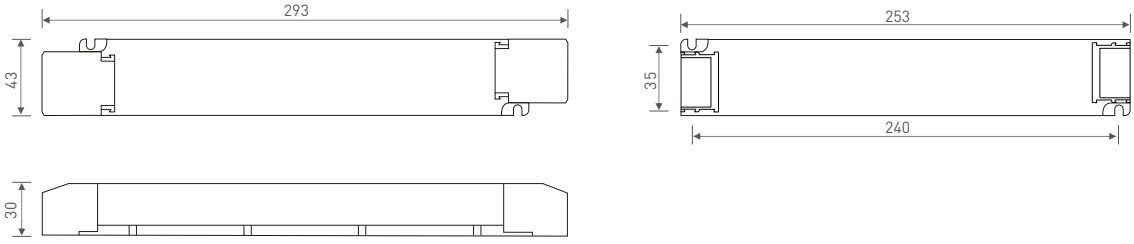
技术参数

型号		LM-75-24-G1T2	LM-75-12-G1T2
输出	输出电压	24Vdc	12Vdc
	输出电压范围	24Vdc ± 0.5Vdc	12Vdc ± 0.5Vdc
	输出电流	Max. 3.125A	Max. 6.25A
	输出功率	Max. 75W	
	输出功率范围	0~75W	
	频闪级别	高频豁免考核级别	
	调光范围	0~100%，调光深度: Max. 0.1%	
	过功率限制	≥102%	
	纹波	≤150mV	
	PWM调光频率	3600Hz	
输入	调光接口	前沿Triac/后沿ELV切相, Push DIM	
	输入电压	220-240Vac	
	频率范围	50/60Hz	
	输入电流	230Vac≤0.4A	
	功率因素	PF>0.98/230Vac (满载)	
	谐波THD	230Vac@THD<6% (满载)	
	效率 (Typ.)	88%	87%
	浪涌电流	冷启动30A/230Vac	
	抗浪涌	L-N: 2kV	
	漏电流	Max. 0.5mA	
环境	工作温度	ta: -20 ~ 50°C tc: 90°C	
	工作湿度	20 ~ 95%RH, 无冷凝	
	储存温度 湿度	-40°C ~ 80°C, 10~95%RH	
	温度系数	±0.03%/°C(0-50°C)	
	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	根据PCB温度超标情况(≥110°C)，智能调节电流输出或关闭，可自动恢复。	
	过载保护	负载电流≥102%, 关闭输出，可自动恢复	
	短路保护	输出线路短路自动关闭，可自动恢复	
	过压保护	空载电压≥26V关闭输出, 异常排除后上电恢复	空载电压≥13V关闭输出, 异常排除后上电恢复
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	
其他	产品尺寸	293×43×30mm(L×W×H)	
	包装尺寸	296×44×33mm(L×W×H)	
	产品重量	350g±10g	

✻ 本款驱动器适合连接电阻限流的LED灯具（如LED灯条）。如果连接内置恒流IC限流的灯具，会产生几十倍的瞬间浪涌电流，导致驱动器会执行过载保护（打嗝频闪）。下单时这类内置恒流IC限流的灯具需要注明（如MR16灯杯、地埋灯、洗墙灯、恒流硬灯条等），以便烧写特殊程序。

尺寸图

单位：mm



连接应用图

Triac连接方式

Push DIM 连接方式

✻ 在直流电压输入的情况下，按键调光无效

调光接口优先级为：首先Triac，然后Push DIM。

Push Dimming

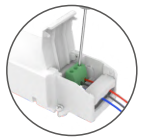
复位开关

- 开关控制: 短按.
- 无级调光: 长按.
- 每隔一次长按，亮度会向相反方向调整.
- 调光记忆: 短按PUSH DIM按键开关时，灯光会回到先前调整的亮度值；断电后再上电，灯光按照输入驱动电源电压调整输出亮度值。

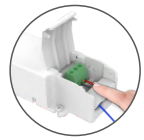
保护盖应用图

压线板

1. 使用工具撬起压线板侧边即可拆下。

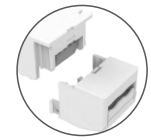


2. 使用螺丝批按照接线图接线。



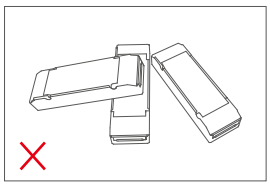
3.向下按压压线板固定住线合上保护盖即可。

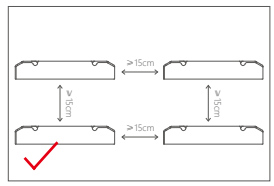
保护盖的拆装



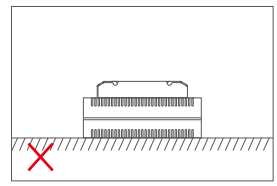
在底部左右掰动，即可将保护盖拆下。

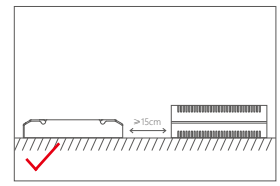
安装注意事项





请勿将产品堆叠摆放，产品与产品间隔距离应≥15cm，避免影响产品散热和使用寿命。

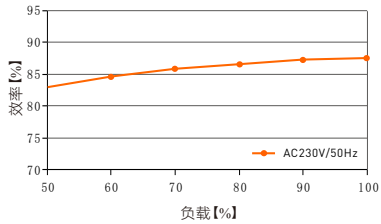




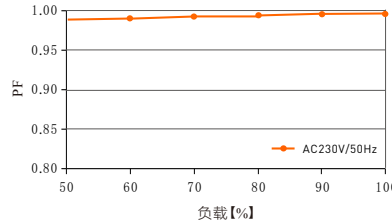
请勿将产品置于电源上方，与电源间隔距离应≥15cm，避免影响产品散热而减少使用寿命。

关系图表

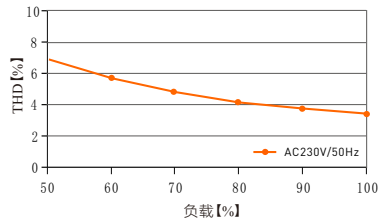
效率与负载关系图



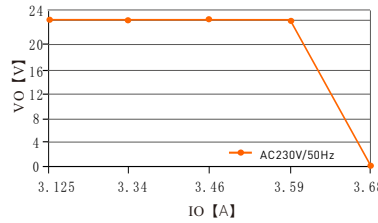
功率因数特征图



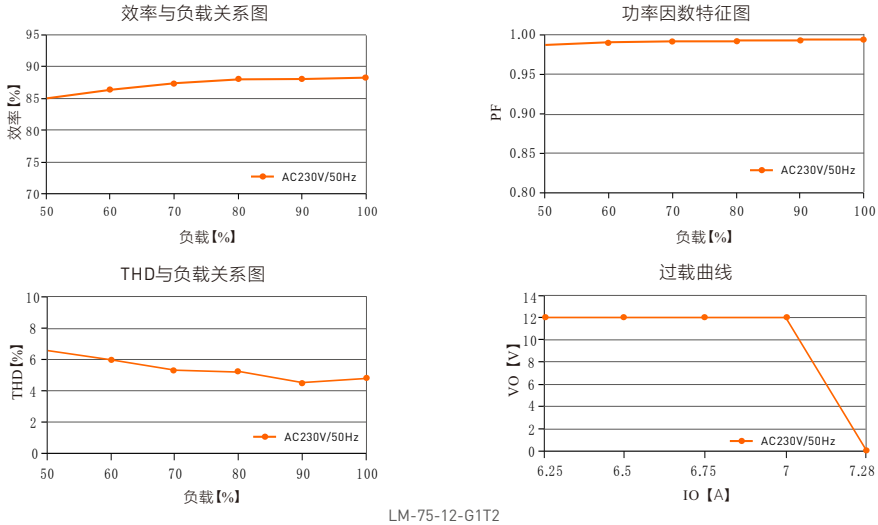
THD与负载关系图



过载曲线



LM-75-24-G1T2

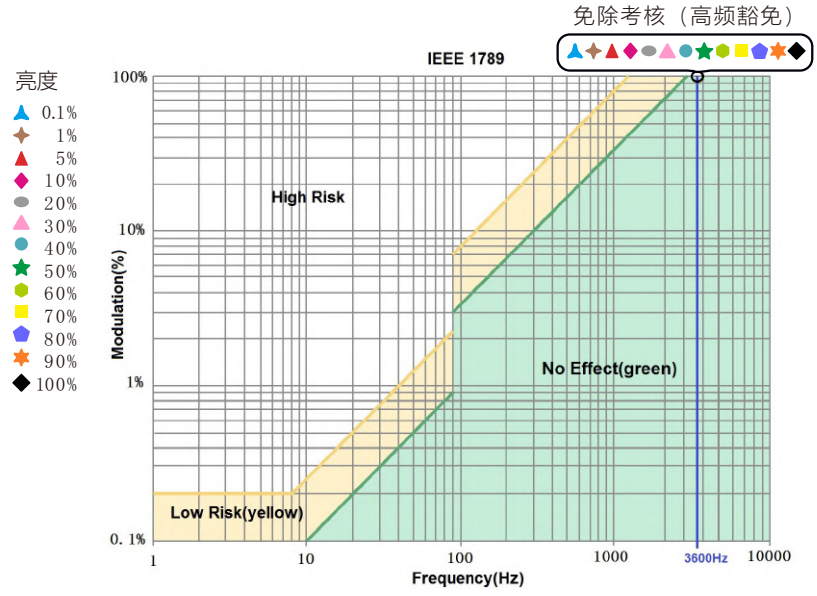


LM-75-12-G1T2

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 ≤ 8Hz	0.2
8Hz < f ≤ 90Hz	0.025 × f
90Hz < f ≤ 1250Hz	0.08 × f
f > 1250Hz	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 ≤ 10Hz	0.1
10Hz < f ≤ 90Hz	0.01 × f
90Hz < f ≤ 3125Hz	(0.08/2.5) × f
f > 3125Hz	免除考核（高频豁免）



包装规格

型号	LM-75-24-G1T2/LM-75-12-G1T2
包装箱尺寸	315×230×215mm（L×W×H）
数量	10PCS/层； 3层/箱； 30 PCS/箱
重量	0.35 kg/PC； 11.3 kg/箱

包装样式图

内包装盒

整箱包装

注意事项

- 本产品请由具有专业资格的人员进行调试安装；
- 本产品(专有型号除外)不能防水，需避免日晒雨淋。如安装在户外，请使用防水箱；
- 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境；
- 安装时，避免靠近大面积金属物体，或堆叠摆放，以免信号干扰影响使用；
- 避免安装在雷区、强磁场和高压区域；
- 请检查使用的工作电压是否符合产品的参数要求；
- 通电调试前，确保所有接线正确且牢固，以免短路损坏部件，触发事故；
- 如果发生故障，请勿私自维修；如果有疑问，请联系供应商。

✻ 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，请与供应商联系。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题雷特将给予免费修理或更换服务。

非保修条例：

属下列情况不在免费保修或更换服务范围之内：

- 已经超出保修服务期；
- 过高电压、超负载、操作不当等人为造成的损坏；
- 产品外形严重损坏或变形；
- 自然灾害以及人力不可抗拒原因造成的损坏；
- 产品保修标签和产品唯一条形码损坏；
- 无雷特签订的合同或发票凭证。

1. 修理或更换是雷特对客户的唯一补救措施。雷特不承担任何附带引起的损害赔偿责任，除非在适用法律范围之内。
2. 雷特享有修正或调整本保修条款的权利，并以书面形式发布为准。

更新日志

版本	更改日期	更改内容	更改人
A4	20251025	更换logo；更新镭雕	何少云