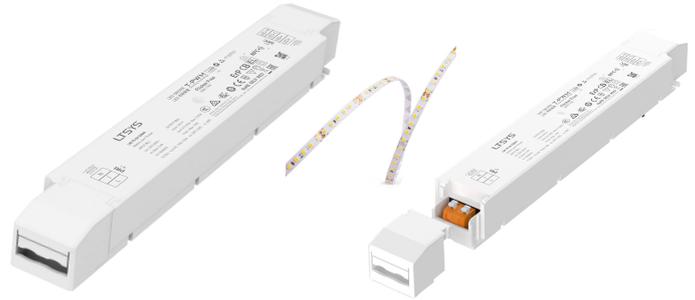## Intelligent Tunable White LED Driver (Constant Voltage)

- The housing is made of Covestro / Samsung PC material with flame retardant grade V0.
- Screw-free flip terminal design, detachable end cap, housing length adjustable as required.
- Supports control via mainstream smart home platforms, including Apple Home, Google Home, Amazon Alexa,
- SmartThings, etc., and supports voice control.
- It must be used with a Matter hub equipped with Thread Border Router function.
- Easy commissioning and pairing by scanning the QR code.
- Supports NFC programming to modify parameters such as dimming fade time, power-on fade time, brightness range, etc.
- Supports standard Matter OTA upgrade.
- Soft start brightening for comfortable vision.
- Dual common-anode SELV output channels.
- Dimming range 0–100%, down to 0.0001%.
- CCT adjustable 1000K~10000K, default 2700K~6500K.
- EU ERP compliant; no-load & standby power <0.5W.
- Advanced thermal management for longer lifetime.
- Over-temperature, over-voltage, overload, short-circuit protection with auto-recovery.
- Suitable for Class I, II, III indoor luminaires.
- Lifetime up to 100,000 hours.
- 5-year warranty (adopting Rubycon capacitors).

matter

DIM/CT

Flicker-Free
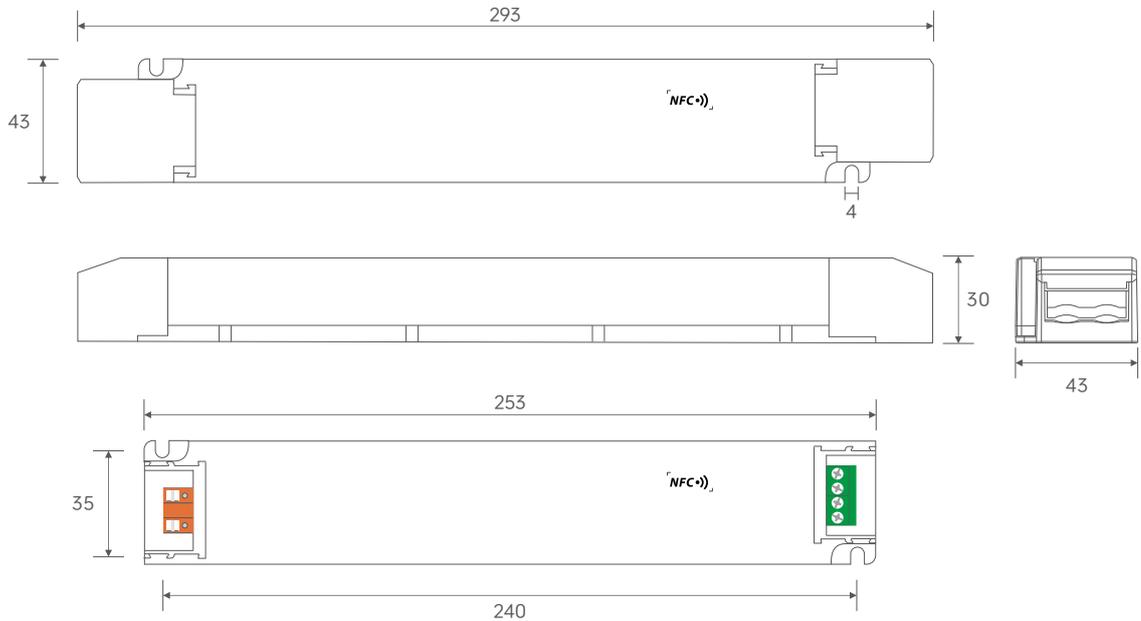IEEE 1789

T-PWM
Dimming Technology

Dimmable:
1:1000000

NFC

CCC CE CB 25 TÜV EHC EL RED ErP SELV RoHS 110

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

PWM
Digital Dimming

Overheat Protection

V
Over voltage protection

Over Load protection

Short circuit protection

Technical Specs

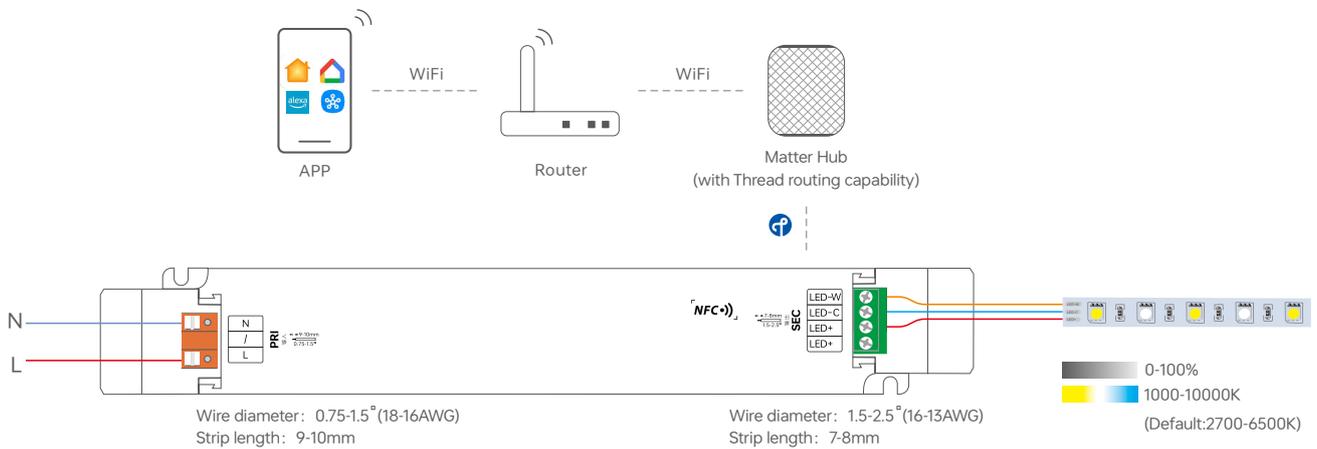| Model		LM-75-24-G2MA	
Features	Output Type	Constant voltage	
	Dimming Interface	Matter over Thread, Matter 1.4	
	Output Feature	Isolation	
	Protection Grade	IP20	
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)	
OUTPUT	Output Voltage	24V⎓	
	Output Voltage Range	24V ± 0.5V ⎓	
	Output Current	Max. 3.125A	
	Output Power	Max. 75W	
	Output Power Range	0-75W	
	Flicker level	High frequency exemption level	
	Dimming Range	0-100%, down to 0.0001%(Set More levels can be set via mobile APP NFC; Default: 0.01%)	
	Overload Power Limitation	≥102%	
	Ripple	300mV	
	PWM Frequency	300-22000Hz	
INPUT	Input AC Voltage	220-240V~	
	Input DC Voltage	220-240V⎓ (EMI needs to be evaluated after the lamp is equipped.)	
	Frequency	50/60Hz	
	Input Current	Max. 0.4A/230V~	
	Power Factor	PF>0.98/230V~ (at full load)	
	THD	THD<10%@ 230V~(at full load)	
	Efficiency (Typ.)	92%	
	Inrush Current	Cold start 45A(Test twidth=300us tested under 50% Ipeak)/230V~	
	Anti Surge	L-N: 2KV	
	Leakage Current	Max. 0.5mA	
ENVIRONMENT	Working Temperature	ta: -20 ~ 50℃ tc: 80℃	
	Working Humidity	20 ~ 95%RH, non-condensing	
	Storage Temperature/Humidity	-40 ~ 80℃, 10~95%RH	
	Temperature Coefficient	±0.03%/℃(-20℃-50℃)	
	Vibration	10~500Hz, 2G 12 mins/cycle, 72 min for X, Y and Z axes respectively	
PROTECTION	Overheat Protection	Intelligently adjust or turn off the output current if the PCB temperature ≥110℃, and recover automatically	
	Overload Protection	Automatically protect the device when the load exceeds 102% of the rated power. Automatically recover once load is reduced	
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically	
	Overvoltage Protection	Shut down the output when no-load voltage≥28V, and recover automatically	
SAFETY & EMC	Withstand Voltage	I/P-O/P:3750V~	
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH	
	Safety Standards	CCC	China	GB19510.1，GB19510.14，GB19510.213
		TUV	Germany	EN61347-1，EN61347-2-13，EN62493
		CB	CB Member States	IEC61347-1，IEC61347-2-13
		CE	European Union	EN61347-1，EN61347-2-13，EN62384
		EAC	Russia	IEC61347-1，IEC61347-2-13
		RCM	Australia	AS 61347-1，AS 61347-2-13
		ENEC	Europe	EN61347-1，EN61347-2-13，EN62384
	EMC Emission	CCC	China	GB/T17743，GB17625.1
		CE	European Union	EN55015，EN61000-3-2，EN61000-3-3，EN61547
		EAC	Russia	IEC62493，IEC61547，EH55015
		RCM	Australia	EN55015，EN61000-3-2，EN61000-3-3，EN61547
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547		
ErP	Power Consumption	Networked standby	< 0.5W (After shutdown by command)	
		No-load power consumption	< 0.5W(When the lamp is not connected)	
	Flicker/Stroboscopic Effect	IEEE1789	Meet IEEE 1789 standard/High frequency exemption level	
		CIE SVM	PstLM≤1.0，SVM≤0.4	
	DF	Phase factor	DF≥0.9	
OTHERS	Weight(N.W.)	290g±10g	
	Dimensions	293×42.5×30mm(L×W×H)	

This driver is suitable for connecting LED lighting fixtures with resistor current limiting (such as LED light strips). If it is connected to a fixture with built-in constant current IC for current limiting, an instantaneous inrush current dozens of times higher will be generated, causing the driver to activate overload protection (hiccup and strobing). When placing an order, such fixtures with built-in constant current IC for current limiting (e.g., MR16 bulbs, underground lights, wall washers, constant current hard light strips, etc.) need to be specified to facilitate the burning of a special program.

Product Size

Unit：mm
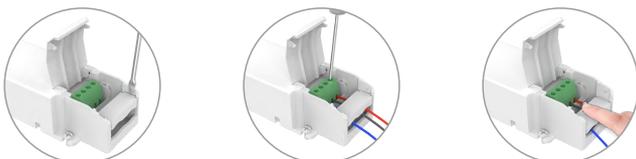

293

43

4

30

43

253

35

240

Wiring Diagram

WiFi   WiFi

APP   Router   Matter Hub
(with Thread routing capability)

N

L

NFC•))

LED-W
LED-C
LED+
LED+

SEC

PRI

0-100%

1000-10000K

(Default:2700-6500K)

Wire diameter：0.75-1.5˚(18-16AWG)
Strip length：9-10mm

Wire diameter：1.5-2.5˚(16-13AWG)
Strip length：7-8mm

*Network access and control via mobile APP

Protective Housing Application Diagram

Tension plate

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

2. Connect to electrical wires with a screwdriver as shown in the wiring diagram.

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
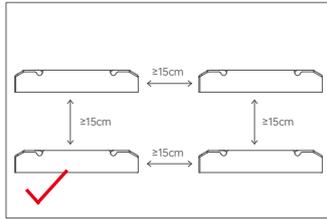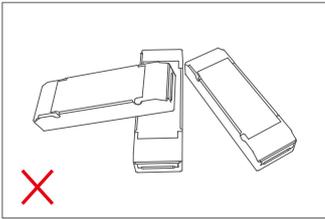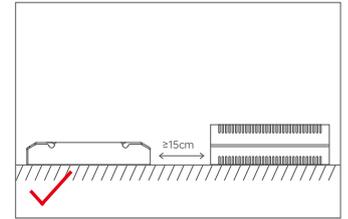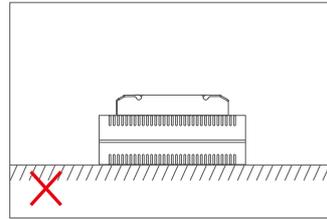

Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.
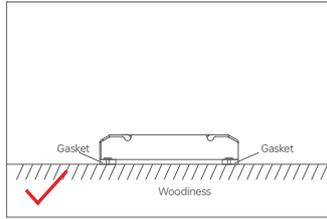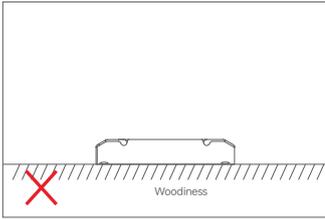
Do not fix the product tightly against the wooden board with screws. Please add a washer ≥7 mm thick under the mounting screws to leave a gap for effective heat dissipation, so as to avoid affecting the heat dissipation and service life of the product.
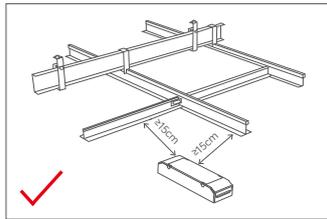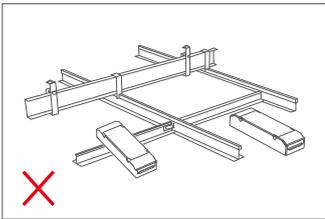

Do not allow the product to come into large-area contact with metal objects (e.g. keel frames). The separation distance shall be ≥15 cm to avoid signal interference affecting operation.

Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.
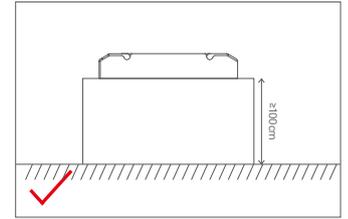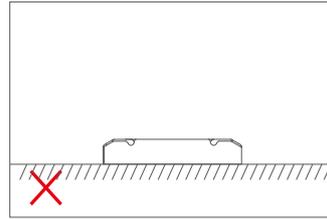
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.
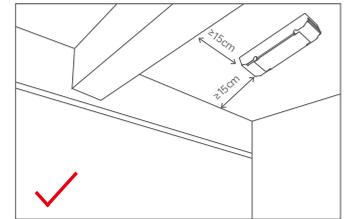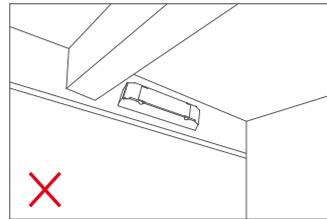
Please do not install the products on beams or near the corners. The distance between the product and the beam or the corner should be ≥15cm so as to avoid signal interference.

Relationship Diagrams
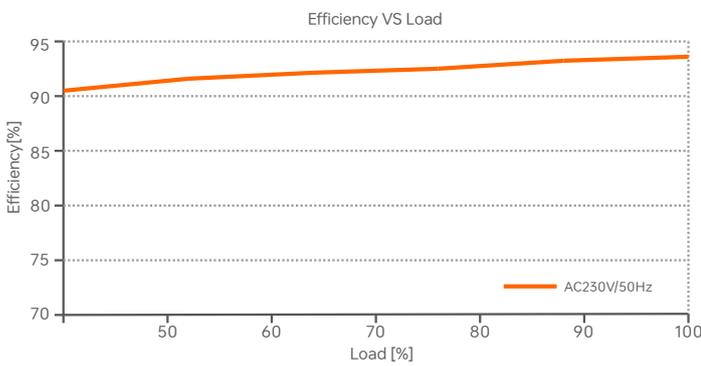

Efficiency VS Load

Power Factor VS Load

THD VS Load

Life time VS Housing temperature

LM-75-24-G2MA
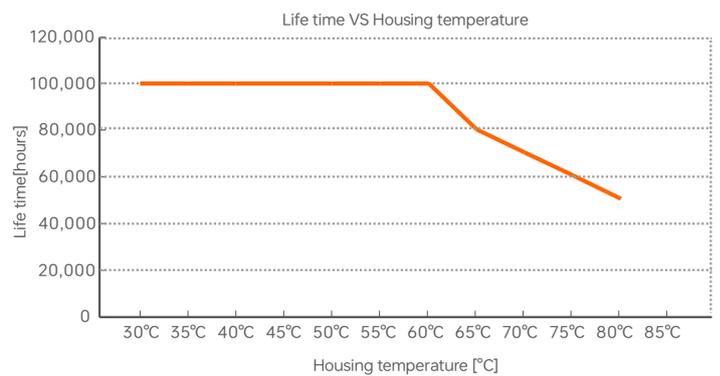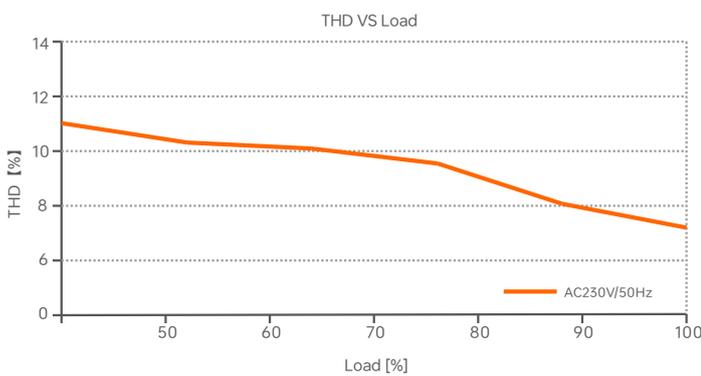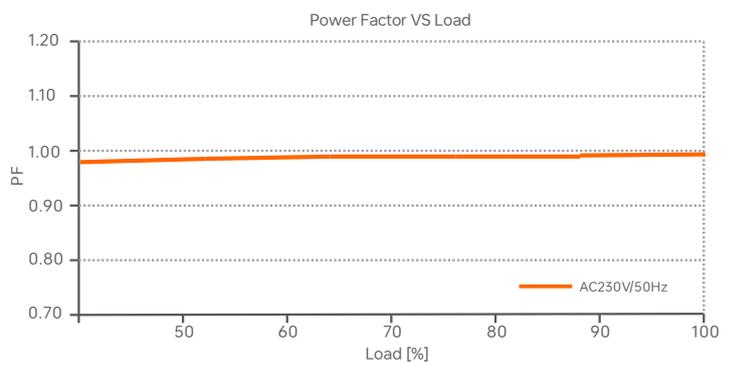
Surge Current & Corresponding Miniature Circuit Breaker (MCB) Load Capacity Table

MCB Model	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
Maximum Load Capacity	5	7	8	10	13	8	9	10	12	15	11	12	13	16	19

Remarks：

1. Test Conditions： Cold start 45A(Test twidth=300us tested under 50% Ipeak)/230V~.

2. The number of supported drivers may vary depending on the brand and model of the MCB.

3.It is recommended not to exceed the specified load capacity during on-site installation. The actual load should be determined based on field conditions.

4.If the ambient temperature exceeds 30℃ or multiple MCBs are installed side by side, the number of installed drivers must be reduced and recalculated accordingly.

5.Electricians typically use Type B MCBs for residential lighting and Type C MCBs for commercial lighting applications.

6.Different testing equipment may yield variations in measured current peaks and pulse widths. Always use professional-grade instruments for accurate testing.
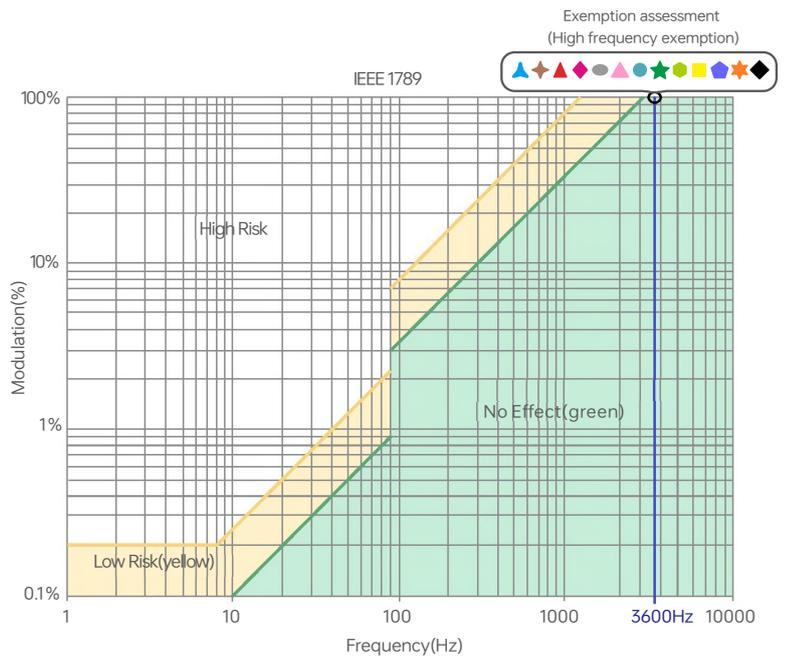
Flicker Test Table

IEEE 1789

Limit Value of Modulation in Low Risk Areas	
Waveform frequency of Optical output (f)	Limit value (%)
f ≤ 8Hz	0.2
8Hz < f ≤ 90Hz	0.025 × f
90Hz < f ≤ 1250Hz	0.08 × f
f > 1250Hz	Exemption assessment

Limit Value of Modulation in No Effect Areas	
Waveform frequency of Optical output (f)	Limit value (%)
f ≤ 10Hz	0.1
10Hz < f ≤ 90Hz	0.01 × f
90Hz < f ≤ 3125Hz	(0.08/2.5) × f
f > 3125Hz	Exemption assessment (High frequency exemption)

Brightness
- 0.1%
- 1%
- 5%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

Exemption assessment (High frequency exemption)

IEEE 1789

High Risk

No Effect(green)

Low Risk(yellow)

Modulation(%): 100% / 10% / 1% / 0.1%

Frequency(Hz): 1 / 10 / 100 / 1000 / 3600Hz / 10000

Add to Matter Platform Instructions

1. This device supports control via major smart home platforms, including Apple Home, Amazon Alexa, Google Home, SmartThings, and others.

2. To connect Matter over Thread devices, you need a Matter hub supporting Thread border router functionality from major platforms. Refer to the image below for compatible models.

Apple Home	Google Home	Amazon Alexa	SmartThings
Apple HomePod (second-gen)	Google Nest Hub (2nd Gen)	Amazon Echo (4th-gen)	Aeotec SmartThings Smart Home Hub
Apple HomePod Mini	Google Nest Hub Max	Amazon Echo Hub	Samsung SmartThings Station
Apple TV 4K (2nd gen)	Google Nest Wifi Pro	Amazon Echo Show 8 (3rd-gen)	Samsung SmartThings Hub Dongle
Apple TV 4K (3rd gen,128 GB)	Google TV Streamer (4K)	Amazon Eero 6, Pro 6, 6 Plus, Max 7 etc.	Samsung SmartThings Hub v3

3. This guide uses Apple Home as an example. First, prepare an iPhone (iOS 16.2 or later) or iPad (iPadOS 16.2 or later) with the latest firmware, along with an Apple HomePod mini also running the latest firmware. Then connect your iPhone or iPad to your home Wi-Fi network, launch the Apple Home app, and follow Apple's instructions to set up the HomePod mini.

*For iPhone models 16 and above, no Matter hub is required; devices can be added directly.

## Adding Steps (Using Apple Home as an Example)

1.Add Accessory

Open the Apple Home app, tap Add or Scan Accessory, and add the device to the Home app by scanning the QR code label on the device, as shown below.

*Alternatively, add via NFC: Open the Home app, bring it close to the device's NFC sensing area for recognition and network connection.
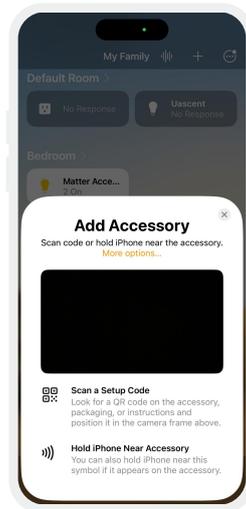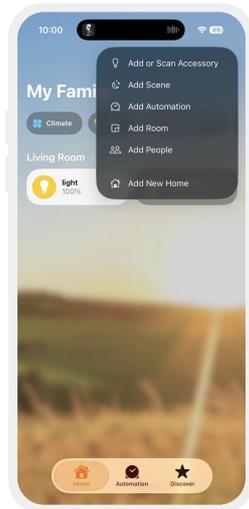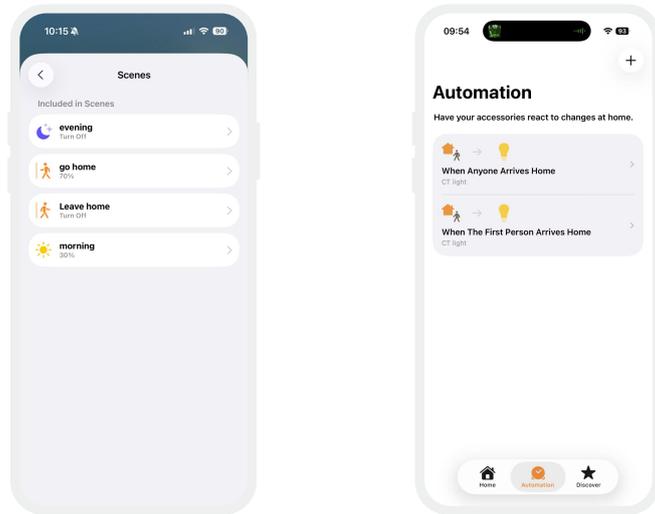
2.Control the Device

After the device has been successfully added, tap the device icon to turn it ON/OFF; tap the device card to enter the brightness and color temperature control interface.
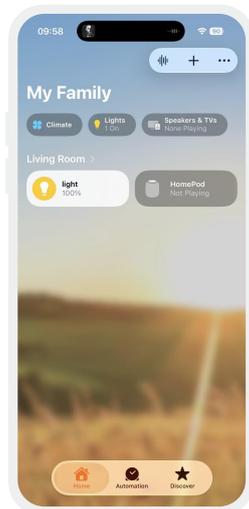
3. Advanced Functions

Supports creating groups, scenes, automation, remote control and timer control. The device can also be controlled via Siri voice commands.

4.Multi-Ecosystem Network Configuration

If the product needs to be added to two or more ecosystems, you may go to the device settings page, tap Enable Pairing Mode, obtain the pairing code, and add it to third-party platforms.
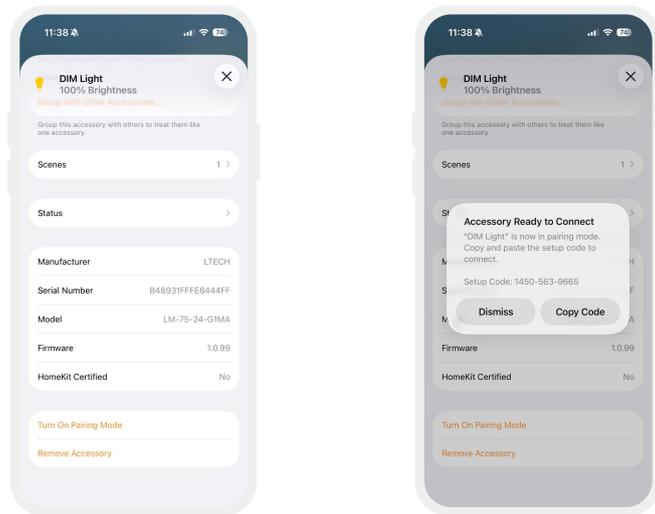
Reset to the defaults

Ensure the device is connected to the light and the light stays on steadily. Turn the power off and on 6 times in a row using the switch: (Turn off for 15 seconds, Turn on for 2 seconds)After the 6th time you turn it on (leave it on for 2 seconds), the light will flash 5 times. This means the device has been successfully restored to factory settings.

Turn it on   2s

Turn it off 15s

Under the driver being power-on

Turn it off —— 15s —— Turn it on —— 2s —— ......

(Repeat 6 times)
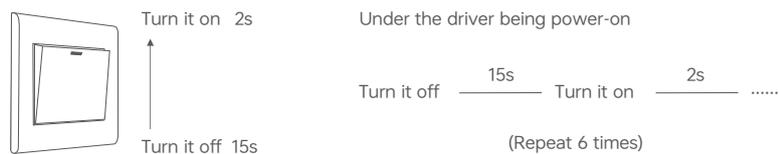
Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).

✳ **Before you begin setting the parameters of the driver, please make sure the driver is powered off .**

Read/Write the LED driver

Use your NFC-capable phone to read LED driver data, then edit the parameters and they can be directly written to the driver.

1.Read the LED driver

On the APP home page, click 【Read/Write LED driver】, then keep the programmer's sensing area close to the NFC sensing area of the driver to read the driver parameters.

NFC sensing area

2.Edit the parameters

Click 【Parameter settings】to edit more advanced parameters such as dimming fade time, power-on fade time, dimming depth, brightness range, CT range, power-on state.
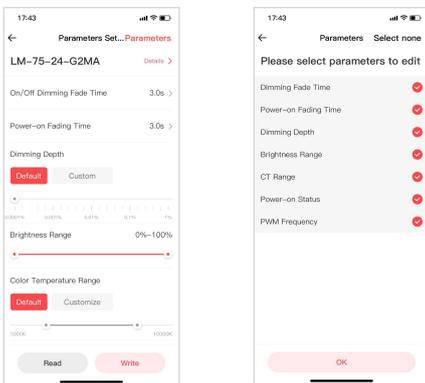
3.Write to the driver

After completing the parameter settings, click 【Write】in the upper right corner, and keep the programmer's sensing area close to the NFC sensing area of the driver, so the parameters can be written to the driver.
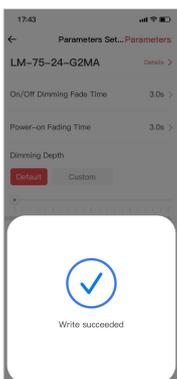
Packaging specification

Model	LM-75-24-G2MA
Packaging box size	315×215×240mm(L×W×H)
Quantity	10 PCS per layer, 3 layers per box, 30 PCS per box
Weight	0.29kg per PC, 9.6kg±5% per box

Packaging Style Drawing

Inner packaging box   Full box packaging

FAQ

This product is designed in compliance with the Matter protocol standard. As the protocol is still in the early stage of industry development and limited by the current version, some functions, performance and network connection stability may be subject to further optimization.
Product performance is subject to the current version of the Matter protocol. Our company will continuously upgrade and optimize product functions and performance in line with official updates. Please kindly note.

1. What should I do if the large number of Matter devices managed by the Matter hub gateway causes unstable connections and control?
1.1 It is recommended that each hub gateway add no more than 40 Matter devices.
1.2 It is recommended that the hub gateway remain powered on at all times; otherwise, the device reconnection time will be long.
1.3 Routers of different brands and performances have a certain impact on the number of devices managed by the Matter hub. It is recommended to choose a high-performance router.

2. What should I do if packet loss occurs during group control switching or dimming, and the app status flips back and forth?
It is recommended to keep the number of devices in a group within 10 units.

3. What should I do if the device goes offline and cannot recover after a long period of inactivity?
It is recommended to power the device off and on again to reconnect.

4. What should I do if adding the device still fails after restoring it to factory settings?
Please try powering the device off and on again before adding it.

5. Common reasons for failed device addition caused by router issues.
5.1 The router must have the IPv6 option enabled.
5.2 The router must have the "Brute-force network attack prevention" option disabled.
5.3 Do not connect to the guest Wi-Fi; connect to the main Wi-Fi network instead.

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 used only after they have been qualified.

Attentions

• Product installation and commissioning should be done by a qualified professional.

• LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.

• Good heat dissipation will prolong the working life of products. Please ensure good ventilation.

• Please check if the working voltage used complies with the parameter requirements of products.

• The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.

• Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.

• If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

＊ 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.

ZHUHAI LTECH TECHNOLOGY CO., LTD.

Address: No. 183, Shui'an 1st Road, Xiangzhou District, 519060 Zhuhai City, PEOPLE'S REPUBLIC OF CHINA   Website：www.ltech-led.com

LED智能色温驱动器 (恒压型)

- 外壳采用科思创/三星PC阻燃V0级原料；
- 免螺丝压线翻盖设计，可拆卸端盖，按需调节壳体长度；
- Matter认证设备，通过IPv6 Thread网络进行通信；
- 支持主流智能家居平台控制，包括 Apple Home、Google Home、Amazon Aleax、SmartThings等，并支持语音控制；
- 需要搭配具备Thread边界路由器功能的Matter中枢使用；
- 通过扫描二维码轻松调试和配对；
- 支持NFC编程更改调光渐变时间、通电渐变时间、亮度范围、色温范围等参数；
- 支持Matter标准OTA升级；
- 带软启动渐亮功能，让人眼视觉更舒服；
- 共阳极两路SELV输出通道；
- 调光范围0-100%，LED从0.0001%开始调光；
- 色温范围可设置1000K-10000K，默认2700K-6500K；
- 符合欧盟能效ERP指令，空载功耗＜0.5W，网络待机功耗 ＜0.5W；
- 创新的热管理技术，智能保护电源寿命；
- 过温、过压、过载、短路保护，可自动恢复；
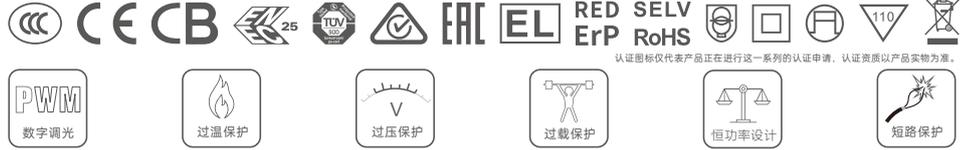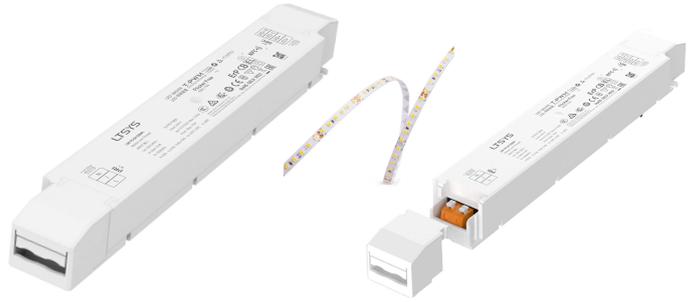- 适合室内I、II、III类灯具应用；
- 常规使用下寿命可达10万小时；
- 5年保修期（采用红宝石电容）；

matter

调光调色温

无频闪
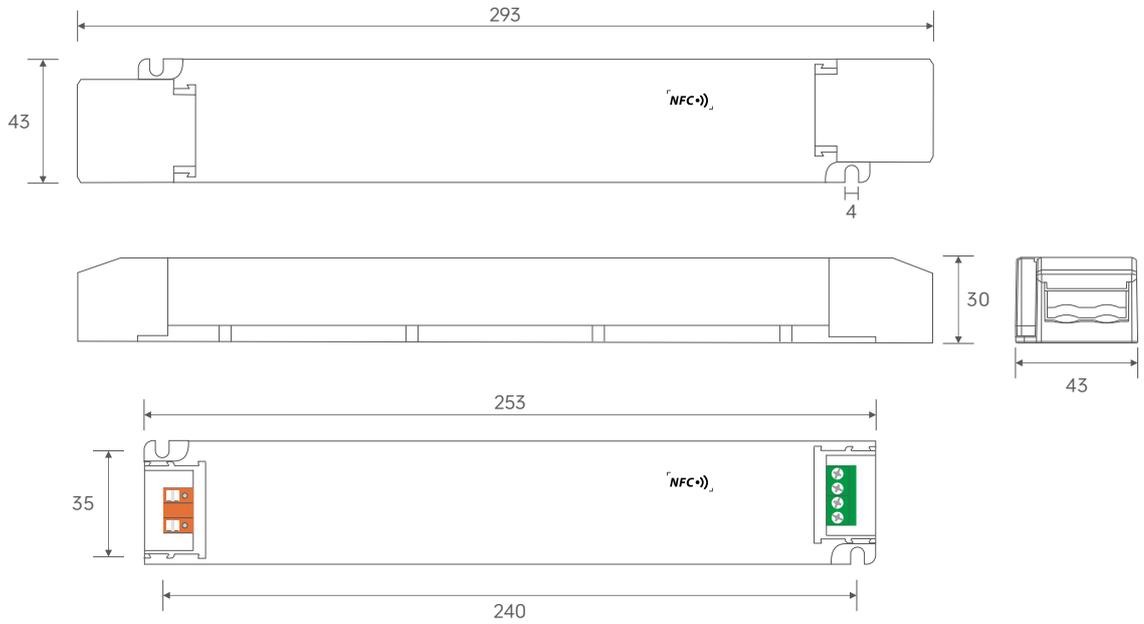IEEE 1789
高频豁免级别

T-PWM
Dimming Technology

Dimmable: 1:1000000 NFC

技术参数

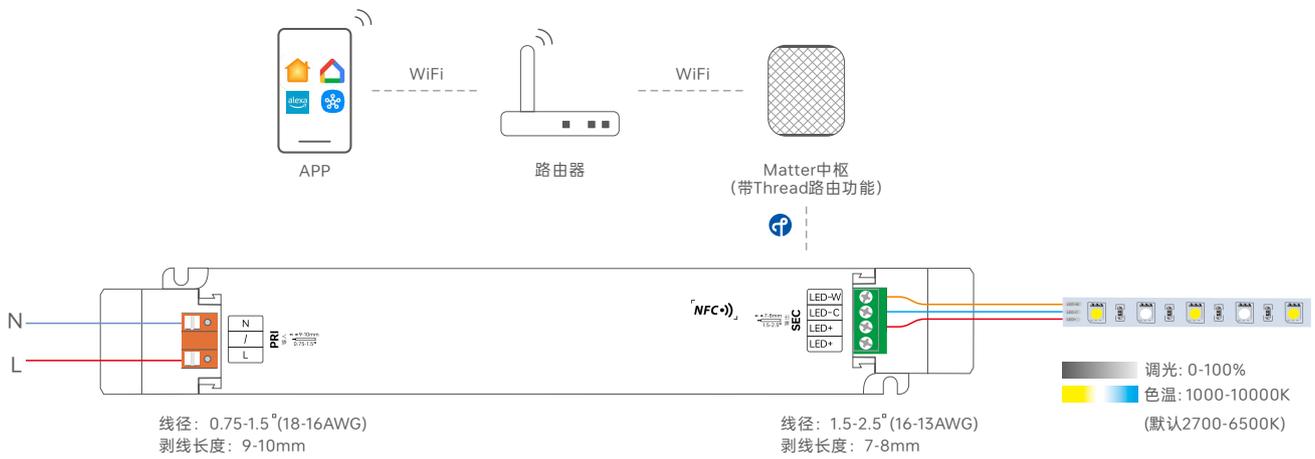| 型号		LM-75-24-G2MA		
特征	输出类型	恒压		
	调光接口	Matter over Thread, Matter 1.4		
	输出特征	隔离		
	防护等级	IP20		
	绝缘等级	II类(适用于室内I、II、III类灯具)		
输出	输出电压	24V⎓		
	输出电压范围	24V ± 0.5V⎓		
	输出电流	Max. 3.125A		
	输出功率	Max. 75W		
	输出功率范围	0-75W		
	频闪级别	高频豁免考核级别		
	调光范围	0-100%，调光深度：0.0001%(通过手机APP NFC设置更多档位，默认: 0.01%)		
	过功率限制	≥102%		
	纹波与噪声	≤300mV		
	PWM调光频率	300-22000Hz		
输入	输入交流电压	220-240V~		
	输入直流电压	220-240V⎓ (EMI需配灯具后评估)		
	频率范围	50/60Hz		
	输入电流	Max. 0.4A/230V~		
	功率因数	PF>0.98/230V~ (满载)		
	总谐波失真THD	THD<10%@ 230V~(满载)		
	效率(Typ.)	92%		
	浪涌电流	冷启动45A (在50%Ipeak下测试twidth=300us)/230V~		
	抗浪涌	L-N: 2KV		
	漏电流	Max. 0.5mA		
环境	工作温度	ta: -20 ~ 50℃ tc: 80℃		
	工作湿度	20 ~ 95%RH, 无冷凝		
	储存温度/湿度	-40 ~ 80℃, 10~95%RH		
	温度系数	±0.03%/℃(-20℃-50℃)		
	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℃)，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	输出线路短路进入打嗝模式，可自动恢复		
	过压保护	空载电压≥28V,关闭输出，可自动恢复		
安规和电磁规格	耐压	输入对输出：3750V~		
	绝缘阻抗	输入对输出：100MΩ/500VDC/25℃/70%RH		
	安全规范	CCC	中国	GB19510.1，GB19510.14，GB19510.213
		TUV	德国	EN61347-1，EN61347-2-13，EN62493
		CB	CB成员国	IEC61347-1，IEC61347-2-13
		CE	欧盟	EN61347-1，EN61347-2-13，EN62384
		EAC	俄罗斯	IEC61347-1，IEC61347-2-13
		RCM	澳洲	AS 61347-1，AS 61347-2-13
		ENEC	欧盟	EN61347-1，EN61347-2-13，EN62384
	电磁兼容发射	CCC	中国	GB/T17743，GB17625.1
		CE	欧盟	EN55015，EN61000-3-2，EN61000-3-3，EN61547
		EAC	俄罗斯	IEC62493，IEC61547，EH55015
		RCM	澳洲	EN55015，EN61000-3-2，EN61000-3-3，EN61547
	电磁兼容抗扰度	EN61000-4-2,3,4,5,6,8,11,EN61547		
ErP	功耗	网络待机功耗	＜0.5W（通过指令开关后）	
		空载功耗	＜0.5W（不接灯具时）	
	频闪/频闪效应	IEEE1789	满足无影响/高频豁免考核级别	
		CIE SVM	PstLM≤1.0，SVM≤0.4	
	DF	相位因素	DF≥0.9	
其他	产品重量	290g±10g		
	产品尺寸	293×42.5×30mm(L×W×H)		

本款驱动器适合连接电阻限流的LED灯具(如LED灯条)。如果连接内置限流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

APP   路由器   Matter中枢（带Thread路由功能）

WiFi   WiFi

N   L

线径：0.75-1.5ﾟ(18-16AWG)
剥线长度：9-10mm

LED-W
LED-C
LED+
LED+

线径：1.5-2.5ﾟ(16-13AWG)
剥线长度：7-8mm

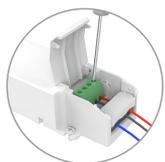调光：0-100%
色温：1000-10000K
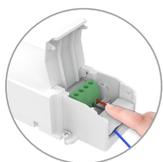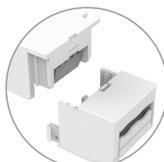（默认2700-6500K）

＊ 通过手机APP入网控制

保护盖应用图

压线板

1. 使用工具撬起压线板
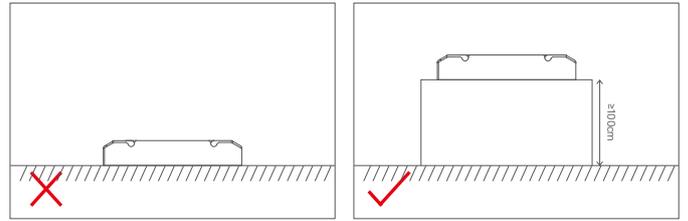　侧边即可拆下。

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
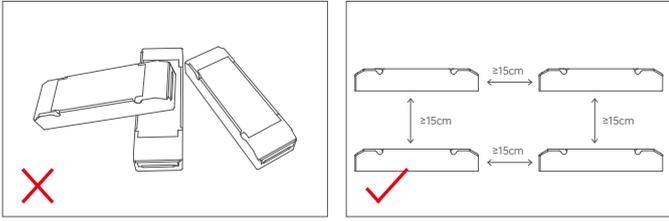
请勿将产品堆叠摆放，产品与产品间隔距离应≥15cm，避免影响产品散热和使用寿命。
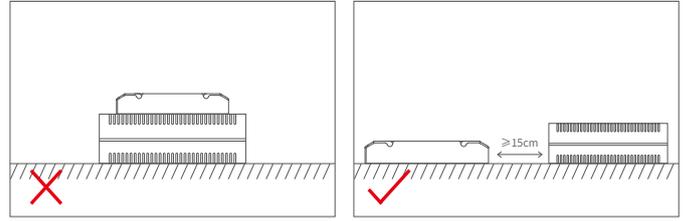
请勿将产品置于电源上方，产品与电源间隔距离应≥15cm，避免影响产品散热而减少使用寿命。
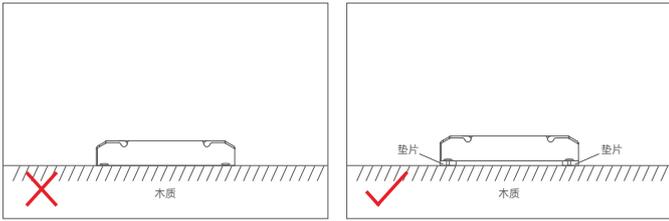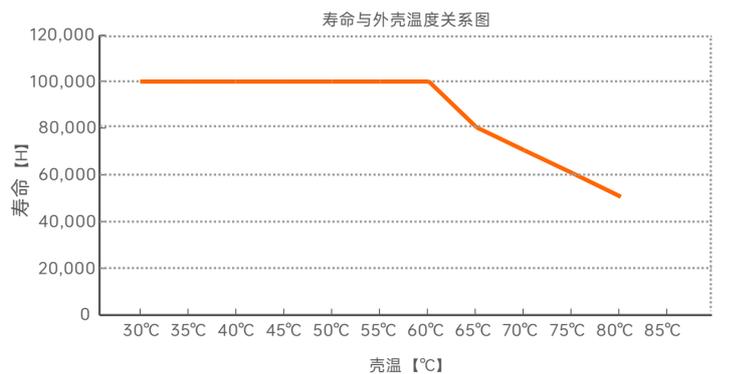
请勿将产品螺丝固定紧贴于木板，应在固定螺丝下增加≥7mm的垫片，留点空隙可以有效散热，避免影响产品散热和使用寿命。

请勿将产品放置在地面上。产品与地面之间的距离应≥100cm，以免信号干扰影响使用。
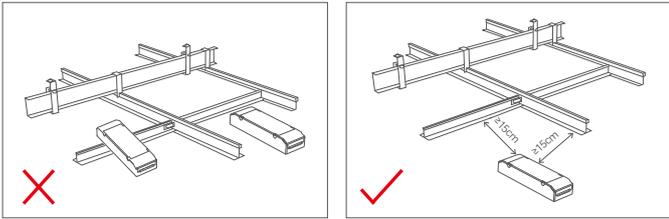
请勿将产品大面积接触金属物体(如：龙骨架)，间隔距离应≥15cm，以免信号干扰影响使用。
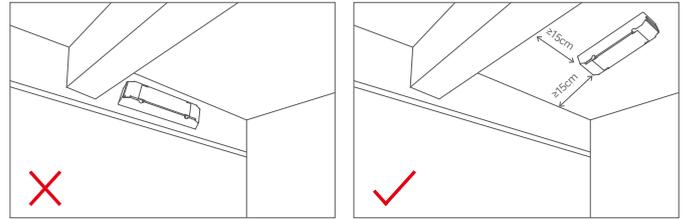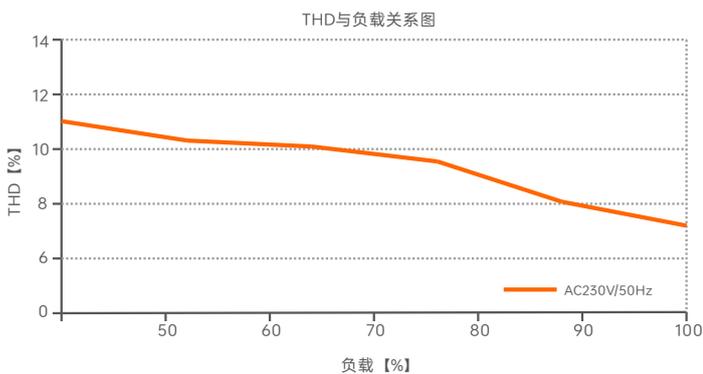
请勿将产品安装在横梁、墙角等位置，间隔距离应≥15cm，以免信号干扰影响使用。

关系图表

效率与负载关系图

效率【%】 / 负载【%】

AC230V/50Hz

功率因数特征图

PF / 负载【%】

AC230V/50Hz

THD与负载关系图

THD【%】 / 负载【%】

AC230V/50Hz

寿命与外壳温度关系图

寿命【H】 / 壳温【℃】

LM-75-24-G2MA
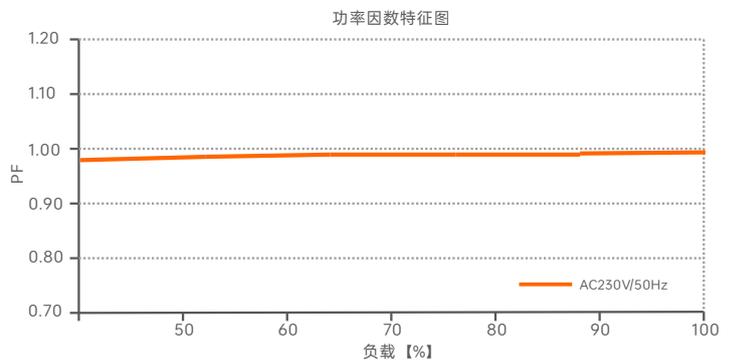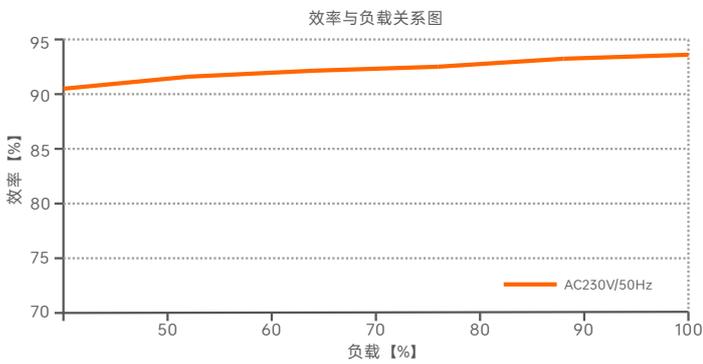
浪涌电流&对应的微型断路器(MCB)下挂载的数量对应表

微型断路器型号	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
最大带载数量	5	7	8	10	13	8	9	10	12	15	11	12	13	16	19

备注：

1. 本数据测试条件：冷启动，45A(在50%Ipeak下测试twidth=300us)/230V~;

2. 对于不同品牌和型号的微型断路器，驱动器的数量会有所不同;

3. 现场安装时建议不要超过上述数量，具体负载量以现场安装为准;

4. 当微型断路器的安装环境温度超过30℃或多个微型断路器并排安装时，安装的驱动器数量将减少，这需要重新计算;

5. 电工通常考虑将B型MCB用于家用照明，将C型MCB用于商业照明;

6. 不同仪器设备测试出来的电流峰值和脉冲宽度有差异，请使用专业仪器设备测试;

频闪测试表

免除考核（高频豁免）

IEEE 1789　　　　亮度

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 (%)
$f \leqslant 8Hz$	0.2
$8Hz < f \leqslant 90Hz$	$0.025 \times f$
$90Hz < f \leqslant 1250Hz$	$0.08 \times f$
$f > 1250Hz$	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 (%)
$f \leqslant 10Hz$	0.1
$10Hz < f \leqslant 90Hz$	$0.01 \times f$
$90Hz < f \leqslant 3125Hz$	$(0.08/2.5) \times f$
$f > 3125Hz$	免除考核（高频豁免）

亮度图例：
- 0.1%
- 1%
- 5%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

IEEE 1789
High Risk
No Effect(green)
Low Risk(yellow)
Modulation(%)
Frequency(Hz)
3600Hz
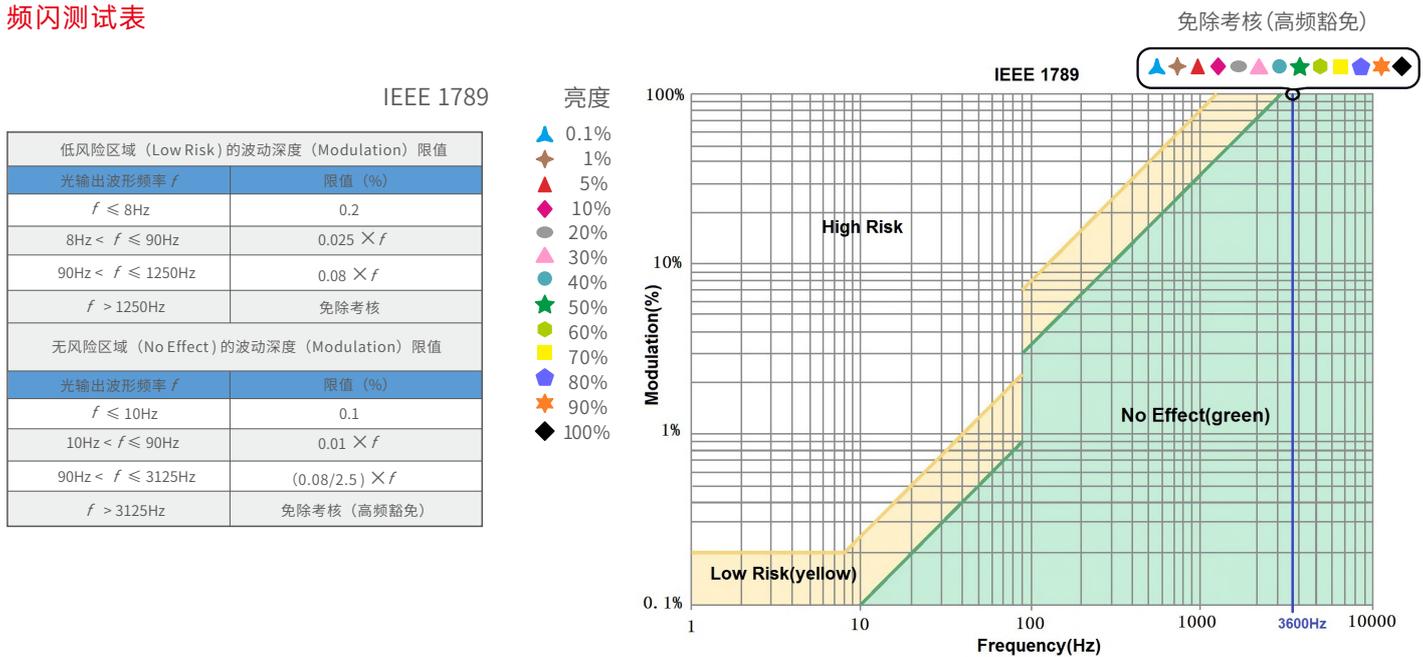
添加到Matter平台说明

1.本设备支持各大主流智能家居平台控制，包括Apple Home、Amazon Alexa、Google Home、SmartThings等。

2.要连接Matter over Thread设备，需要准备各大平台支持Thread边界路由功能的Matter中枢，型号可以查看下图。

Apple Home	Google Home	Amazon Alexa	SmartThings
Apple HomePod (second-gen)	Google Ne.st Hub (2nd Gen)	Amazon Echo (4th-gen)	Aeotec SmartThings Smart Home Hub
Apple HomePod Mini	Google Nest Hub Max	Amazon Echo Hub	Samsung SmartThings Station
Apple TV 4K (2nd gen)	Google Nest Wifi Pro	Amazon Echo Show 8 (3rd-gen)	Samsung SmartThings Hub Dongle
Apple TV 4K (3rd gen,128 GB)	Google TV Streamer (4K)	Amazon Eero 6, Pro 6, 6 Plus, Max 7 etc.	Samsung SmartThings Hub v3

3.本说明书以Apple Home为例，请先准备一台装有最新版本固件的 iPhone（iOS 16.2 或更高版本）或 iPad（iPadOS 16.2 或更高版本），以及一台装有最新版本固件的 Apple HomePod mini。然后将 iPhone 或 iPad 连接到您的家庭 WLAN 网络，运行 Apple Home 应用程序并按照 Apple 的指示设置 HomePod mini。

*如苹果手机型号是iphone 16及以上，则无需Matter中枢，可直接添加。

添加步骤（以苹果家庭为例）

1.添加配件

打开苹果"家庭" app，并点击"添加或扫描配件"，通过扫描设备上的二维码贴纸，将设备添加到"家庭"APP ，如下图所示。

*也可以通过NFC入网：打开"家庭"APP靠近设备的NFC感应区域，识别入网。

2.控制设备

成功添加设备后，点击设备图标进行开/关；点击设备卡片进入亮度、色温控制界面。

3. 高级功能

支持创建组、场景、自动化、进行远程控制和定时控制，也可以通过Siri语音指令控制设备。

4.多生态配网

如果产品需要加入到两个或者多个生态，可以进入设备设置页，点击"打开配对模式"，获取配对码并添加到第三方平台。

恢复出厂设置

确保设备已接灯且处于常亮状态下，使用开关让设备连续通断电6次(每次断电时间15秒，通电2秒)，第6次通电2秒后，灯具闪烁5次，即表示设备已恢复出厂设置状态。

开 (通电) 2秒

关 (断电) 15秒

在通电情况下进行

断电 —— 15秒 —— 通电 —— 2秒 —— ......

(重复6次)

搭配 NFC Lighting APP 使用

通过手机扫描下方二维码，按提示完成APP安装。

(因性能需求，要求手机型号苹果：iPhone 8及以上、且操作系统iOS13及以上；　安卓：具备NFC功能机型)

＊ 设置驱动器参数时，必须在驱动器断电情况下进行操作。
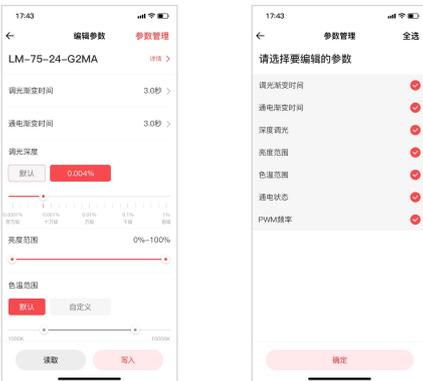
读/写智能电源

使用手机，通过NFC读取驱动器信息，根据需求设置参数后，可直接写入驱动器。

1. 读取驱动器

在APP "首页" 点击 【读/写智能电源】，将手机感应区域靠近驱动器NFC感应区，读取驱动器参数。

NFC感应区

2. 编辑参数

点击【参数管理】可编辑调光渐变时间、通电渐变时间、亮度范围、色温范围、通电状态、PWM频率等更多高级参数。

3. 写入驱动器

参数设置完成后，点击【写入】，将手机感应区域靠近驱动器NFC感应区，即可写入驱动器成功修改参数。

包装规格

型号	LM-75-24-G2MA
包装箱尺寸	315×215×240mm(L×W×H)
数量	10个/层；3层/箱；30个/箱
重量	0.29kg/个；9.6kg±5%/箱

包装样式图

包装盒

整箱包装

常见问题

本产品遵循Matter协议标准设计，因该协议尚处行业发展初期，受当前版本限制，部分功能、性能及网络连接稳定性存在优化空间。产品表现以当前Matter协议版本为准，我司将随官方版本持续升级并优化产品功能与性能，敬请知悉。

1.Matter中枢网关管理的Matter数量多，导致连接不稳定，控制不稳定怎么办？

1.1 建议每台中枢网关添加matter设备不要超过40台；

1.2 建议中枢网关保持常通电，否则设备重连时间较长；

1.3 不同品牌，不同性能的路由器对matter中枢管理的设备数量有一定的影响，建议选择性能强大的路由器。

2.群组控制开关，调光出现丢包，app出现状态来回跳动清空怎么办？

建议群组数量控制在10台以内。

3.长时间不控制设备，设备掉线，无法恢复怎么办？

建议设备断上电重新连接。

4.设备恢复出厂设置后，依旧添加设备失败怎么办？

建议断上电后再添加设备。

5.常见的路由器原因导致添加设备失败的原因。

5.1 路由器需要开启IPV6选项；

5.2 路由器需要关闭"防暴力破解网络"选项；

5.3 不要连接"访客模式"下的WiFi，需要连接主WiFi。

运输和贮存

1.运输

产品适用车、船、飞机交通运输工具运输。

在运输中，应使用遮蓬进行防雨和防晒，并保持文明装卸，不应有剧烈振动、撞击等。

2.贮存

贮存符合Ⅰ类环境的规定。贮存期限超过6个月的产品建议重新检验，合格后方可使用。

注意事项

- 请由具有专业资格的人员进行调试安装。
- 雷特产品（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。
- 请检查使用的工作电压是否符合产品的参数要求。
- 使用的电线直径大小必须能足够负载连接的LED灯具，并确保接线牢固。
- 通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏。
- 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科技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；
- 无雷特科技签订的合同或发票凭证。

1.修理或更换是雷特科技对客户的唯一补救措施。雷特科技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.雷特科技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。