

PUP10D-1WMC-700 (102100680101)

Summary

PUP10D-1WMC-700 is a constant current output mode LED driver. Support DALI dimming function, Touch DIM (Push DIM) function. The output and dimming circuit are also completely in accordance with the new regulations with isolation to ensure the users and luminaire system during installation.

Product Features

- Single channel output, output current level selectable by DIP S.W.
- Support DALI dimming function, Touch DIM (Push DIM) function
- Input voltage of 120VAC ~ 277VAC
- Dimming range: 0.1-100%, Dimming effect smooth, no flicker
- Protections: Short circuit, Over load, Over voltage
- Suitable for indoor LED lighting application



Application



Downlight

Panel Light

Spotlight

Ceiling Light

Decorative Light

Floor Light

Track Light

Flood Light

Technical Paramaters

Model	PUP10D-1WMC-700				
Input	Voltage	120VAC-277VAC			
	Frequency	50/60Hz			
	Efficiency	79%@120VAC, Full load			
	PF	0.98@120VAC, Full load			
	THD(full load)	<10%@120VAC, Full load			
	Current	0.12Amax@120VAC			
	Inrush Current	Cold start,30A@120VAC			
	Standby Power	<1W			
Output	Current/Voltage/Power	350mA/2-21V/7.35W 400mA/2-21V/8.4W	450mA/2-21V/9.45W 500mA/2-20V/10W	550mA/2-18V/9.9W 600mA/2-16V/9.6W	650mA/2-15V/9.75W 700mA/2-14V/9.8W
	Channel	1			
	No load output voltage	58V Max			
	Frequency	1KHz Min PWM			
	Current Accuracy	±5%			
	LF current ripple(<120Hz)	<3%			
Protection	Over Voltage	Hiccup, recovers after fault condition is removed			
	Over load	Hiccup, recovers after fault condition is removed			
	Short circuit	Close output, recovers automatically after fault removed			
Safety & EMC	Surge	L-N:1KV			
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA; I/P-Gnd: 1500VAC/1min/5mA; O/P-Gnd: 500VAC/1min/5m			
	Safety standards	UL8750/UL1310/CSA25013,CSA class P			
	EMI Emission	EN55015,EN61000-3-2 Class C,IEC61000-3-3			
	EMC Immunity	FCC class B(120V)/class A(277V)			
Function	Dimming type	DALI/Touch DIM (Push DIM)			
	Dimming range	0.1%-100% Dimming to off			
Others	Dimension	75*35*26.5mm[L*W*H]			
	Pack Information	N.W: 96g±5%/PCS; 100PCS/Carton; 10.1kg±5%/Carton; Carton Size: 398x210x208mm[L*W*H]			
	IP rating	IP20			
	Working temp.	-20°C~50°C			
	tc	90°C			
	Relative humidity	20~90% RH			
	Lifetime	50,000h@tc:85°C			
	Material	PC			
	Switch cycle	>25,000 times			

Remark: Use only within an enclosure

Dimension(mm)



75
67.8
35
27.8
3.2

DALI Signal Input

EUCHIPS

PUP10D-1WMC-700

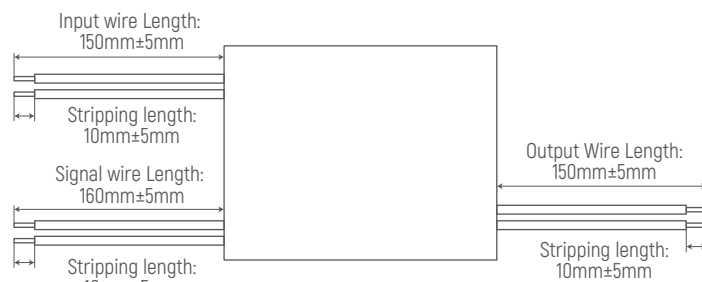
Signal Input

- (紫) DA1(Purple)
- (粉) DA2(Pink)
- (黒) L (Black)
- (白) N (White)

Output

- (紅) LED+(Red)
- (黒) LED-(Black)

LED Strip Light



The diagram illustrates the wiring for a DALI system. A DALI Controller is connected to three DALI Driver 1 units. The DALI Controller has terminals for DA, L, and N. Each DALI Driver 1 has terminals for DA, L, and N. The DA line is connected to the DA terminal of each driver. The L and N lines are connected to the L and N terminals of each driver. The LED light fixture is connected to the LED+ and LED- terminals of each driver.

The diagram illustrates a DALI dimmer control system using a Push DIM Panel (Touch DIM). The panel is connected to a power source (N, L) and a DALI Driver 1. The DALI Driver 1 is connected to an LED light fixture. The diagram shows three identical DALI Driver 1 units, each connected to an LED light fixture. The DALI Driver 1 is connected to the LED light fixture via a DALI line (DA, L, N) and a power line (LED+, LED-).

The graph illustrates the relationship between the DALI Dimming Level and the Output Current [%]. The main graph shows a curve that starts at 0% current for DALI level 1 and rises to 100% current at DALI level 254. An inset graph provides a detailed view of the curve for DALI levels 1 to 50, showing the output current increasing from approximately 0.05% to 0.4%.

DALI Dimming Level	Output Current [%]
1	0.05
10	0.15
20	0.30
30	0.45
40	0.60
50	0.75
100	1.5
150	3.0
200	6.0
250	15.0
254	100.0

Push DIM Function

1. Press the Touch DIM (Push DIM) switch for 8s or more, the driver can be controlled via Push DIM switch.
2. Short press the Touch DIM (Push DIM) switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM (Push DIM) switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM (Push DIM) switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Push DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

PUP10D-1WMC-700 is a multi-current dimming driver, output current level selectable by DIP S.W., as the following:

[illegible]

Cautions

- 1.This product should be installed by qualified personnel.
- 2.This product is non waterproof, need to avoid sun and rain.In case of outdoor use, please ensure it is mounted in a water proof enclosure.
- 3.Good heat dissipation conditions extend product life.Please install the product in a well-ventilated environment.
- 4.Please make sure LED power supply output voltage, current is used to meet the product requirements.
- 5.Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
- 6.Due to safety concerns, PVC or rubber cord of 0.75-2.5mm² is recommended for input and output terminal(s) [excluding signal terminals]. Flat power cord is not suitable.Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 7.In case of malfunction, do not repair it yourself.

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概述

PUP10D-1WMC-700是一款恒流输出模式LED驱动器。输出和调光电路完全符合新规定，隔离，确保用户和灯具系统在安装过程中使用。

产品特点

- 单通道输出，输出电流电平可通过DIP S.W.选择。
- 支持DALI调光功能, 触摸调光(按键调光)功能
- 输入电压120V~277V
- 调光范围：0.1-100% 调光效果平滑，无闪烁
- 保护：短路、过载、过压
- 适用于室内LED照明应用，如筒灯、聚光灯、面板灯等





应用



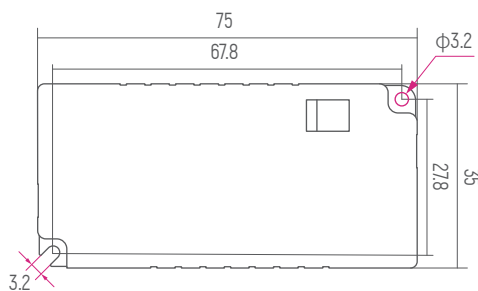
筒灯 面板灯 射灯 吸顶灯 装饰灯 落地灯 隧道灯 投光灯

技术参数

产品型号	PUP10D-1WMC-700				
输入	电压	120VAC-277VAC			
	频率	50/60Hz			
	效率[典型]	79%@120VAC,满载			
	功率因数[典型]	0.98@120VAC,满载			
	THD[满载]	<10%@120VAC, 满载			
	电流	0.12Amax@120VAC			
	浪涌电流	Cold start,30A@120VAC			
	待机功耗	<1W			
输出	电流/电压/功率	350mA/2-21V/7.35W 400mA/2-21V/8.4W	450mA/2-21V/9.45W 500mA/2-20V/10W	550mA/2-18V/9.9W 600mA/2-16V/9.6W	650mA/2-15V/9.75W 700mA/2-14V/9.8W
	通道	1			
	空载输出电压	58V Max			
	输出频率	1KHz Min PWM			
	电流精度	±5%			
	低频纹波电流[<120Hz]	<3%			
保护	过压保护	打嗝，移除故障后自恢复			
	过载保护	打嗝，移除故障后自恢复			
	短路保护	关断输出，移除故障后自恢复			
安全与电磁兼容	浪涌	L-N:1KV			
	耐受电压	I/P-O/P: 3000VAC/1min/5mA; I/P-Gnd: 1500VAC/1min/5mA; O/P-Gnd: 500VAC/1min/5m			
	安全标准	UL8750/UL1310/CSA25013,CSA class P			
	电磁兼容	EN55015,EN61000-3-2 Class C,IEC61000-3-3			
	EMC电磁抗扰度	FCC class B(120V)/class A(277V)			
功能	调光模式	DALI/Touch DIM (Push DIM)			
	调光范围	0.1%-100% 可调灭			
其它	产品尺寸	75*35*26.5毫米(长*宽*高)			
	包装信息	净重: 96g±5%/个; 100个/箱; 10.1kg±5%/箱; 外箱尺寸: 398x210x208mm(L*W*H)			
	防水等级	IP20			
	工作环境温度	-20°C~50°C			
	tc	90°C			
	相对湿度	20~90% RH			
	寿命	50,000h@tc:85°C			
	材料	PC			
	开关机次数	>25,000 次			

备注: 仅在外壳内使用

The diagram shows a rectangular frame with a series of vertical lines inside, creating a grid-like pattern. On the right side, a vertical dimension line with arrows at both ends is labeled '26.5', indicating the height of the structure.



DALI 信号输入

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PUP10D-1WMC-700

Signal Input

- (紫) DA1(Purple)
- (粉) DA2(Pink)
- (黑) L (Black)
- (白) N (White)

Output

- (红) LED+(Red)
- (黑) LED-(Black)

3
2
1



The diagram illustrates the wiring for three DALI drivers connected to a single DALI master control unit. The master unit, labeled 'DALI 主控', has four input terminals: 'DA', 'DA+', 'L', and 'N'. The three DALI drivers, each labeled 'DALI驱动器1', also have four input terminals: 'DA', 'DA+', 'L', and 'N', and an 'LED' output terminal. The 'DA' and 'DA+' lines are connected in a daisy-chain configuration: the 'DA' terminal of the first driver is connected to the 'DA+' terminal of the master, and the 'DA+' terminal of the first driver is connected to the 'DA' terminal of the second driver. This pattern continues for the second and third drivers. The 'L' and 'N' lines are connected to the common power lines. The 'LED' outputs of the three drivers are connected to three spotlights.

Push DIM 面板(Touch DIM)

• DA
• DA
• L
• N

DALI驱动器1

LED
LED

• DA
• DA
• L
• N

DALI驱动器1

LED
LED

• DA
• DA
• L
• N

DALI驱动器1

LED
LED

Figure 1 is a graph showing the DALI dimming curve. The x-axis represents the DALI dimming level (DALI调光等级) from 1 to 254. The y-axis represents the output current percentage (输出电流(%)) from 0 to 120. An inset graph shows a zoomed-in view of the curve for DALI dimming levels 1 to 50, with output current ranging from 0 to 0.4. The curve starts at approximately 10% output current for DALI level 1 and increases to 100% output current for DALI level 254.

[illegible]

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