

General

Product Type	Constant Voltage Driver
Length (mm)	292
Width (mm)	43
Height (mm)	30
Housing Color	White
Housing Material	Plastic
Mounting	Surface mounted
Weight (g)	300

Electronics

Input Domain	AC
Input Voltage	220 ~ 240V AC
Output Voltage	24V DC
Output Current Max. (A)	4.17
Output Power Range (W)	0~100
Output Power (W)	100W @ 24V
Power Factor at Full Load	+0.98 @ 230VAC
Power Supply	Internal
Power Supply Anti Surge	Internal L-N: 2kV
Anti Surge	L-N: 2kV
Anti Surge Efficiency	L-N: 2kV 93%
Anti Surge Efficiency Leakage current max. (mA)	L-N: 2kV 93% 0.5

LightingColor Range

Control

Output Signal	PWM-CV
Control	O-10V
Dimming Range	O~100%
Number of Channels	2

Tunable White

Protection

Protection Class	II
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Environmental

Operating Temperature	-20 ~ +50 °C
Ingress Protection	IP20

(€ IP20

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.

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0-10V 1-10V 10V PWM RX Push

5 in 1 DIM & CT adjustment

LTECH

LED Intelligent Driver

- Dimming interface: 0-10V(1-10V/10V PWM/RX), Push DIM/CCT
- 0-10V DIM and color temperature adjusting driver, 2 independently SELV constant voltage output channels.
- Constant power design, adjust different color temperature to keep the same brightness.
- Dimming range from 0-100%, LED start at 0.1% possible.
- Color temperature adjusting range: 2700-6500K
- Automatic recognition of 0-10V, 1-10V input signal.
- 0~100% flicker-free, achieve the level of exemption assessment.
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- \bullet Suitable for indoor $\mathbb{I}/\mathbb{II}/\mathbb{II}$ type lamps application.











Achieve the exemption level.





DIM & CT adjustment





Dimmable: 0.1%-100%











Flicker-free

IEEE 1789





Specification

Model		LM-75-12-G2A2	LM-75-24-G2A2	LM-100-24-G2A2	
	Output Voltage	12Vdc	24Vdc		
	Output Voltage Range	12Vdc ±0.5Vdc	24Vdc ±0.5Vdc		
	Output Current	Max. 6.25A	Max. 3.125A	Max. 4.17A	
OUTPUT	Output Power	Max. 75W		Max. 100W	
	Output Power Range	0~75W		0~100W	
	Strobe Level	High frequency exemption level.			
	Dimming Range	0~100%, dimming depth: Max. 0.1%			
	Overload Power Limitation	≥102%			
	Ripple & Noise	≤200mV	≤300mV		
	PWM Frequency	≤3600Hz			
	Dimming Interface	0-10V(1-10V/10V PWM/RX) DIM/CCT, Push DIM/CCT			
	Input Voltage	220-240Vac	220-240Vac		
	Frequency	50/60Hz			
	Input Current	Max. 0.4A/230Vac	Max. 0.5A/230Vac		
	Power Factor	PF>0.97/230Vac, at full load		PF>0.98/230Vac, at full load	
INPUT	THD	≤14% at 230Vac, at full load ≤12% at 230Vac, at full load		≤12% at 230Vac, at full load	
	Efficiency (typ.)	91%	92%	93%	
	Inrush Current(typ.)	Cold start 30A at 230Vac (twidth=1000µs measured at 50% peak) Cold start 45.2A at 230Vac (twidth=172µs measured at 50% peak)			
	Control surge capability	L-N:2KV			
	Leakage Current	Max. 0.5mA			
	Working Temperature	ta: -20°C ~ 50°C tc: 80°C			
	Working Humidity	20 ~ 95%RH, non-condensing			
ENVIRONMENT	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.			
	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.			
PROTECTION	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≥102%, auto recovers.			
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, auto recovers.			
	Withstand Voltage	I/P-0/P: 3750Vac			
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH			
SAFETY &	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13			
EMC	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			
	Dimension	293×43×30mm(L×W×H)			
OTHERS	Packing	296×44×33mm(L×W×H)			
	Weight(G.W.)	300g±10g			

^{*} The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The instantaneous surge current will be several 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







0-10V/Push DIM/CCT

Wiring Diagram

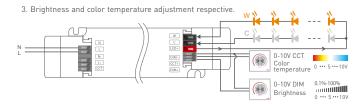
0-10V Connection





2. Color temperature adjustment.

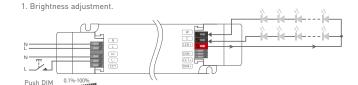


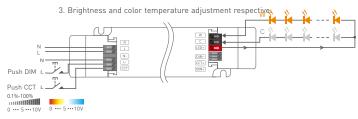


4. Brightness and color temperature adjustment simultaneous. 0-10V CCT 0-10V DIM

> Brightness and color temperature adiustment simultaneous

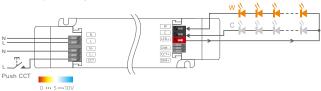
Push DIM/CCT Connection

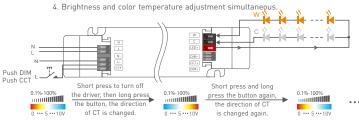




2. Color temperature adjustment

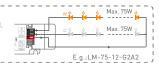
0.1%-100%





* Dimming interface priority: First 0-10V, next Push DIM/CCT.

* Adopting constant power program design, it keeps the same brightness in color temperature dimming, twice the rated power load can be connected 75W driver, 75W X 2CH load can be connected, the total power of the 2 channels will be kept in 75W. 100W driver, 100W X 2CH load can be connected, the total power of the 2 channels will be kept in 100W



Push DIM/CCT

DIM

- On/off control: Short press.
- Stepless dimming: Long press.
- · With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted. when turning off and on again.

CCT

- · Color temperature adjustment: Long press.
- · With every other long press, the color temperature level goes to the opposite direction.
- Color temperature memory: Color temperature will be the same as previously adjusted when turning off and on again.



Reset switch

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DIM/CCT

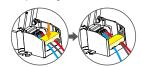
- On/off control: Short press.
- · Stepless dimming and changing color: Long press.
- With every other long press, the CT goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

* Applicable to brightness adjustment, color temperature adjustment and brightness/CT adjustment respective of Push DIM/CCT connection.

Application of Protective Cover

Wire pressing board:

Reset switch

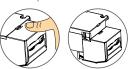


Push the wire pressing board to fix the wire.



Push outward the side plate, meanwhile use the tool to uninstall the wire pressing board.

Uninstall protective cover:



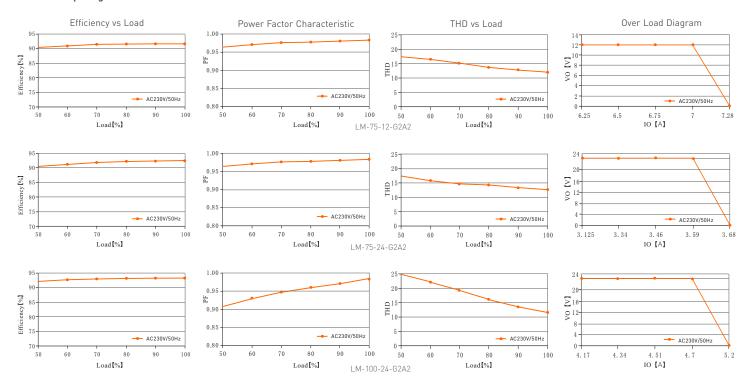


* Applicable to brightness and CT adjustment simultaneous of Push DIM/CCT connection.

Break off the bottom left and right to remove the protective cover.



Relationship Diagrams



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