# 0/1-10V Constant Current LED Driver

Model No.: RZ-VD-250-900-25F

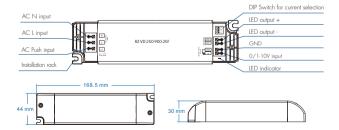




## **Features**

- Dimming interface: 0-10V, 1-10V, 10V PWM, Resistor, AC Push-Dim
- Universal AC input / Full range
- Flicker-free
- 1 channel constant current output, configurable current via DIP switch
- Built-in active PFC function: 0.95 Typ
- Over-heat / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

# Mechanical Structures and Installations





## Technical Parameters

	Output Voltage	10~52VDC
Output	Output Current	250~900mA
	Output Power	Max. 25W
	Max Output Voltage	52VDC
	Dimming Range	0~100%
	PWM Frequency	8000Hz
	Current Accuracy	±5%
	Ripple&Noise	< 100mV
	Input Voltage Range	100~240VAC
Input	Frequency Range	50/60Hz
	Efficiency	>82%/230VAC
	Alternating Current	0.28A/115VAC, 0.14A/230VAC
	Anti Surge	LN:1.5KV
	Startup time	1S/230VAC
	Power Factor	>0.99/115VAC, >0.95/230VAC
	THD	<8%
	Inrush Current	Cold start 18.4A at 230VAC
	Leakage Current	< 0.5mA/230VAC
	No Load Power	< 2W
	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.
Protection	Short Circuit	Shut down automatically if short circuit occurs, auto recovers.
	Over Temperature	Intelligently adjust or turn off the output current if the PCB temp $> 100$ °C, auto recovers.
Environment	Woking Temperature	-30℃~50℃
	T-case Max	70°C
	Working Humidity	20%~90%RH, non-condensing
	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH
	Temperature Coefficient	±0.03%/°C (0-50%)
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Z axes/2min
	IP Rating	IP20
Safety&EMC	Security Specifications	IEC/EN61347-1, IEC/EN61347-2-13
	Withstand Voltage	I/PO/P: 3750VAC
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3
	EMC Immunity	EN61000-4-2.3.4.5.6.8.11, EN61547
	Certications	CE FMC

#### LED Current Selection:

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Output Voltage	10-52V	10-52V	10-52V	10-52V	10-50V	10-42V	10-36V	10-28V
Output Current	250mA	300mA	350mA	400mA	500mA	600mA	700mA	900mA
Output Power	2.5-13W	3-15.6W	3.5-18.2W	4-20.8W	5-25W	6-25.2W	7-25.2W	9-25.2W

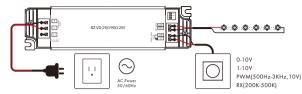
# **Applications**

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

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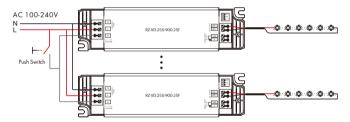
# Wiring Diagram

### 1. 0/1-10V Connection



- The O/1-10V input is operable via commercially available simple rotary wall switchs designed for O/1-10V dimming equipment or from decicated system central dimming controllers.
- Compliant with 0-10V. 1-10V. 10V PVVM. RX(4 in 1).
- We recommend the number of LED drivers connected to 0/1-10V dimmer does not exceed 25 pieces,
- The maximum length of the wires from dimmer to LED driver should be no more than 50 meters.
- If the LED driver be used with Push-Dim interface prior to using the 0/1-10V interface, the O/1-10 V signal should change over 10% to return O/1-10 V control.

#### 2. AC Push-Dim connection



The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switchs.

#### • Short press:

Turn on or off light.

#### Long press (1-6s):

Press and hold to step-less dimming,

With every other long press, the light level goes to the opposite direction.

#### • Dimming memory:

Light returns to the previous dimming level when switched off and on again, even at power failure.

#### Synchronization:

If more than one LED driver are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.

This means there is no need for any additional synchrony wire in larger installations.

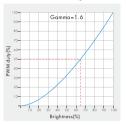
We recommend the number of LED drivers connected to a push switch does not exceed 25 pieces,

The maximum length of the wires from push to LED driver should be no more than 50 meters.

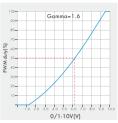
# Dimming Curve







## 0/1-10V dimmina



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