

# 1 Channel Constant Voltage Power Repeater

Model No.: EV1-X

1 Channel/PWM signal input/Constant voltage output/3KV optoelectronic isolation



## Features

- 12-24V constant voltage power repeater.
- 1 channel, 30A per channel.
- To receive PWM signal control.
- Power repeater in series or in parallel to expand output unlimitedly.
- Apply to single color constant voltage LED strip or module.

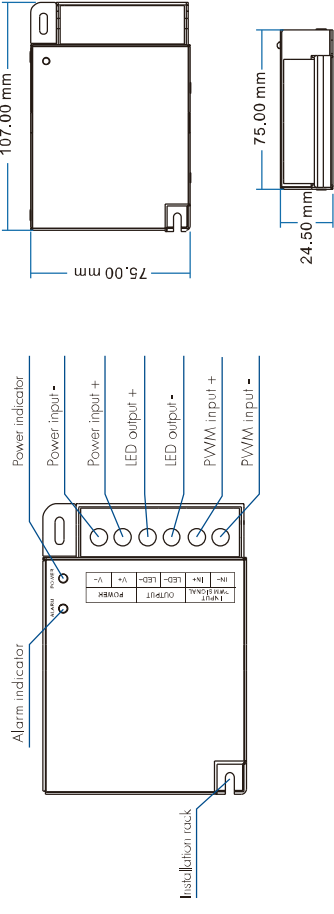
## Technical Parameters

Input and Output	
Input voltage	12-24VDC
Input current	30A
Input signal	PWM
Output voltage	12-24VDC
Output current	30A
Output power	360-720W
Output type	Constant voltage
Environment	
Operation temperature	Ta: +30 °C ~ +55 °C
Case temperature (Max.)	Tc: +85 °C
IP rating	IP20

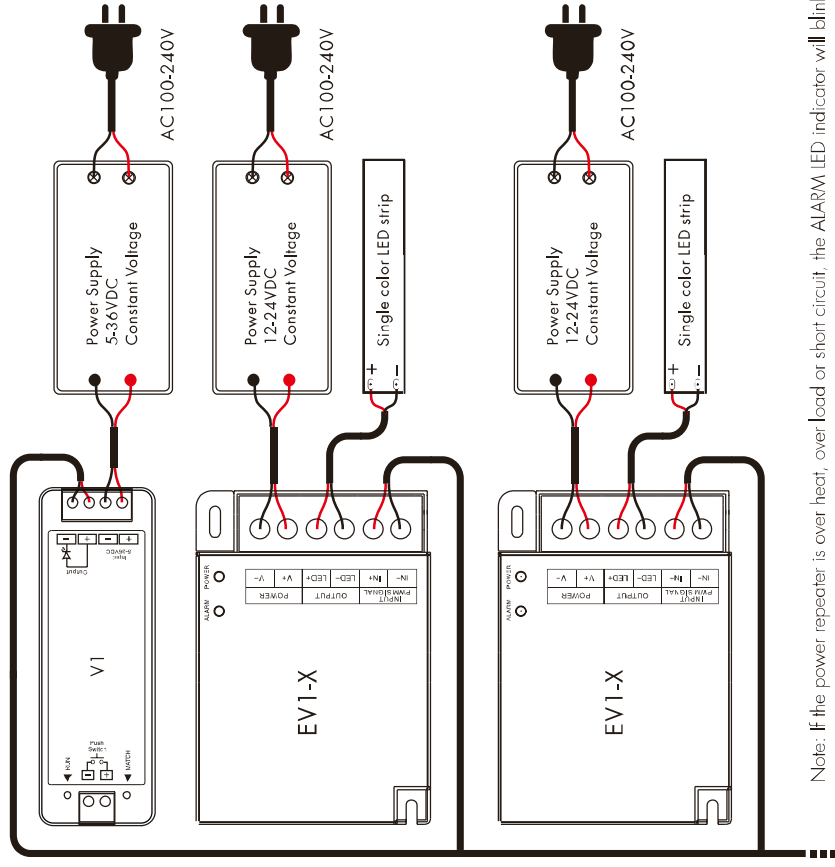
Safety and EMC	
EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-17 V3.2.4
Safety standard(LVD)	EN 62368-1:2020+A11:2020
Certification	CE,EMC,LVD
Warranty and Protection	
Warranty	5 years
Protection	Reverse polarity Over-heat Over-load Short circuit

CE RoHS LVD

## Mechanical Structures and Installations



## Wiring Diagram



Note: If the power repeater is over heat, over load or short circuit, the ALARM LED indicator will blink.

## Malfunctions analysis & troubleshooting

Malfunctions	Causes	Troubleshooting
No light	<ol style="list-style-type: none"> <li>No power.</li> <li>Wrong connection or insecure.</li> </ol>	<ol style="list-style-type: none"> <li>Check the power.</li> <li>Check the connection.</li> </ol>
Uneven intensity between front and rear, with voltage drop	<ol style="list-style-type: none"> <li>Output cable is too long.</li> <li>Wire diameter is too small.</li> <li>Overload beyond power supply capability.</li> <li>Overload beyond controller capability.</li> </ol>	<ol style="list-style-type: none"> <li>Reduce cable or loop supply.</li> <li>Change wider wire.</li> <li>Replace higher power supply.</li> <li>Add power repeater.</li> </ol>

## Safety & Warnings

- The product shall be installed and serviced by a qualified person.
- This product is non-waterproof. Please avoid the sun and rain.
- Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- Please check if the output voltage of any power supplies used comply with the working voltage of the product.
- Ensure all wire connections and polarities are correct and secure before applying power to avoid any damages to the LED lights.
- If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.