48V Constant Voltage Power Supply (200W)

Datasheet



HD-200W48V

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Before using this product, please read this datasheet carefully and keep it properly!

Document Version：C

◇◆ Overview

48V Constant Voltage Power Supply (200W)(hereinafter referred to as "the product" or "the device") is an LED switching power supply. The product provides stable 48V constant voltage output and has functions such as AC/DC dual input and intelligent constant voltage and current, which can provide safe and efficient power for LED.

Main features:

- AC input / DC output
- Adapt to the harsh working environment
- Adopt isolation design, safe and reliable
- Prevent instantaneous surge impact
- Overload, short circuit, and over-temperature protection
- CE certification, compliance with safety requirements LVD
- 100% full load burn-in test
- Suitable for LED lighting
- Dimension: L230×W40×H31mm
- Automatic intelligent constant voltage and current mode

◇◆ Technical Data

Model		JW-48-200WA
Input	Rated voltage	200V-240VAC
	Frequency	47~63 Hz
	Power factor	PF≥0.65 100% Rated state
	Efficiency	>91%
	AC current	1.6A/220VAC
	Inrush current	20A/220VAC
	Leakage current	5mA/220VAC
Output	Output voltage (Load)	(48±1)VDC
	Output current (Load)	4.1A
	Rated power	200W
	Ripple and noise	≤100mV
	Linear adjustment rate	±1%
	Load regulation	±2%

	Start time	1500ms/220VAC
Protection	Overcurrent protection	No
	Automatic buck mode	Yes
	Short-circuits protection	Output shorted 1-2 seconds, then turn off the power and reconnect it to ensure normal operation.
	Overvoltage	Off mode, when the output exceeds normal use, the output is turned off. After the abnormal load condition is removed, it can be restored by restarting.
Environment	Working temperature	-20℃~+50℃
	Working humidity	20%~95% RH, non-condensed
	Storage temperature&humidity	-40℃~+80℃/10%~95%RH
	Temperature coefficient	±0.06%/℃(0~50℃)
	Protection grade	IP40
Safety	Pressure	I/P-O/P:1.5KVAC 5mA
	Insulation resistance	I/P-O/P:100M ohms/500VDC/25℃70% RH
Others	Dimension (unit: mm)	L238×W40×H31
	Input line length	N/A
	Weight	340g

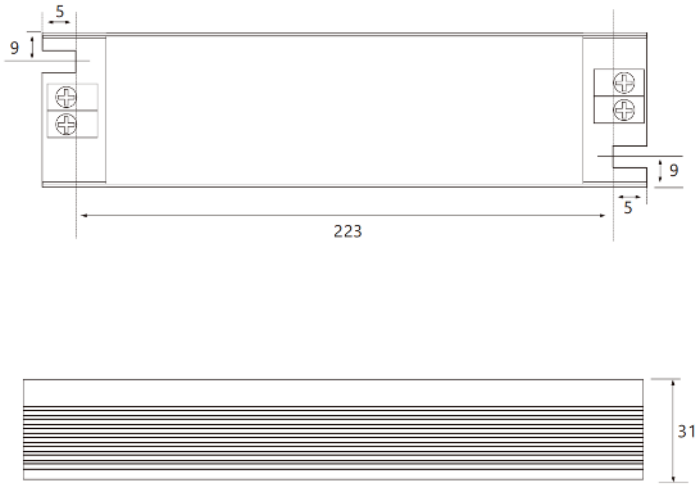


Figure 1(Unit: mm)

◇◆ Safety Precaution

Danger:

- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

Warning:

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. (hereinafter referred to as HDL) or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this datasheet.
- Please contact HDL after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to the warranty.

Caution:

- Before performing any installation or disassembly procedures on the device, it is crucial to disconnect the device from all voltage sources. This step is necessary to ensure the safety of the technician and prevent any potential damage to the device.
- Do not use corrosive liquid to wipe the device body, especially the interface, so to avoid damage to the device. Do not wipe the device with a damp cloth.
- Before performing any maintenance or cleaning procedures on the device, it is imperative to disconnect the device from all voltage sources. This precautionary measure is necessary in order to prevent electric leakage and the risk of electric shock.
- After all of the cables are terminated, check for correct and good terminations.
- Overrange is not allowed. Please use the device in accordance with the technical specifications.

◇◆ Wiring

Please wire according to the following figure:



Figure 2

The block diagram shows the flow of power and the major internal components.

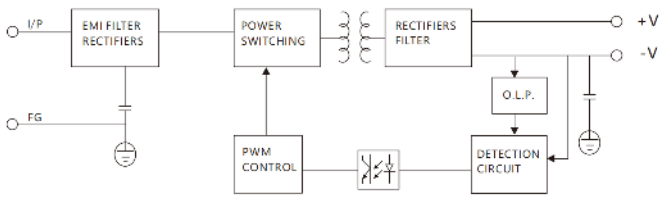


Figure 3

◇◆ Packing List

- 48V Constant Voltage Power Supply (200W)*1

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Update History:

The form below contains the information of every update. The latest version contains all the updates of all former versions.

Version	Update Information	Date
V1.0	Initial release	Sept. 9, 2025

◇◆ Technical Support

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