

HT

INFINITE POWER



HT Series DC/DC power module Product specification

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1.product introduction

1.1.Model description

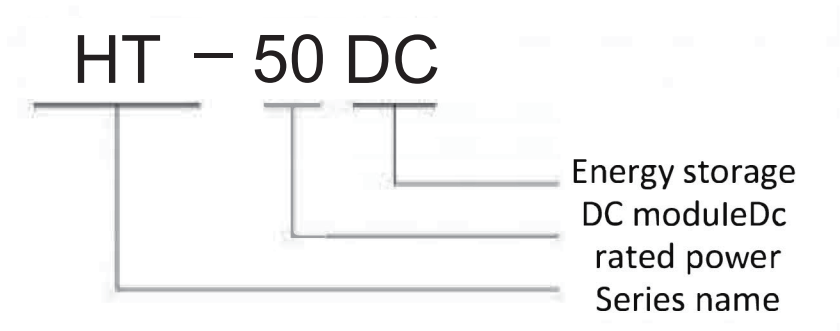


Figure 2-1 Model identification

1.2. product features

- Using the three-level topology, the highest efficiency can reach 99%, and the power quality is better;
- Support constant current, constant power, constant voltage, MPPT control;
- Standard rack-type modular design, flexible configuration, convenient maintenance, convenient capacity expansion;
- Ultra-wide voltage range, adapt to a variety of photovoltaic panels, flexible battery configuration;
- Suitable for a variety of batteries including lithium / lead acid / photovoltaic module / DC bus.

1.3. product parameters

Power module parameters of the energy storage converter are as follows:

Table 2-1 Converter module parameters

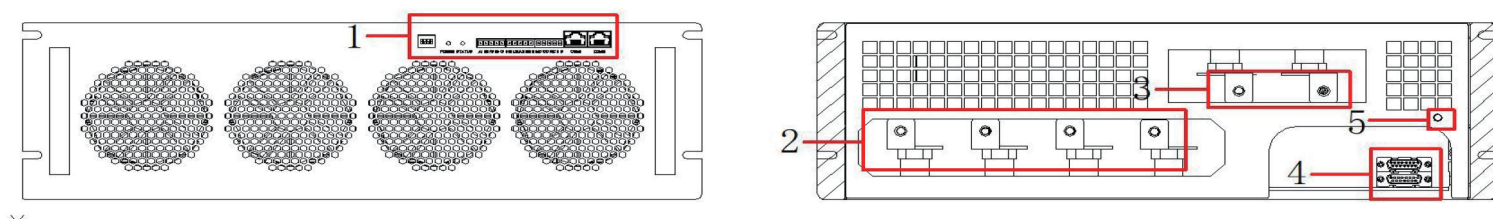
HT-50DC	
Rated power	50kW
maximum power	55kW
Solar input	
Maximum DC voltage	1000V
Solar operating voltage range	200V ~950V
MPPT full-load voltage range	500V ~950V
Maximum PV current	160A
Battery input / output	

Battery type	Lithium battery / lead acid / other DC bus line
Maximum DC voltage	1000V
Battery operating voltage range	200V ~950V
Maximum charge and discharge power	55kW
Maximum charge and discharge current	160A
Charging method	According to the BMS instruction / three-stage / MPPT
Working mode	Constant current, constant power, constant voltage, and MPPT
maximal efficiency	99%
Dimensions (W * D * H)	483 (excluding 444) * 600 * 150mm
Weight	25kg
isolation method	Non-isolation
levels of protection	IP 20
Working temperature	-25°C ~ + 60°C (> 45°C drop)
relative humidity	0 ~95% (non-condensation)
cooling-down method	Intelligent air cooling
noise	<70d B
above sea level	3000m (> 3000m drop)
communication interface	CAN

1.4. product appearance

one should know that

Anti-disassembly label and bar code, is an important basis for product quality assurance, do not remove



(1) Signal port (2) Low-voltage side interface (3) High-voltage side interface (4) parallel interface (5) grounding port

Figure 2-2 Energy storage power module

1.5.Interface description

1.5.1. Description of the signal port

The module signal port consists of dial switch, indicator light, phoenix terminal and RJ 45 terminal.

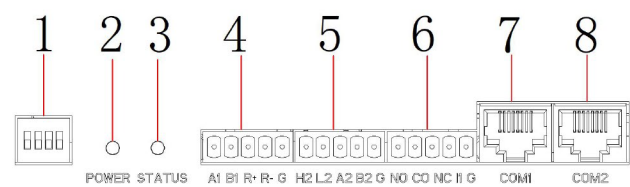


Figure 2-3 Signal port

Table 2-2 Description of the signal ports

number	name
1	Dial address
2	Power supply indicator light (red)
3	Status indicator light (green)
4	N /A
5	N /A
6	N /A
7	RJ 45 Interface 1 (CAN communication interface)
8	RJ 45 Interface 2 (CAN communication interface)

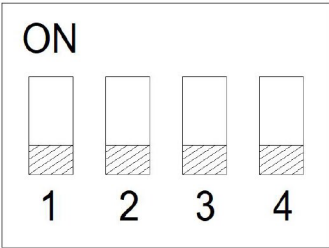


Figure 2-4 Code dialing switch

The dial switch has two pins on the back of each key. If the ON side is 1 or 0, there are 16

hardware addresses

It can be set up.

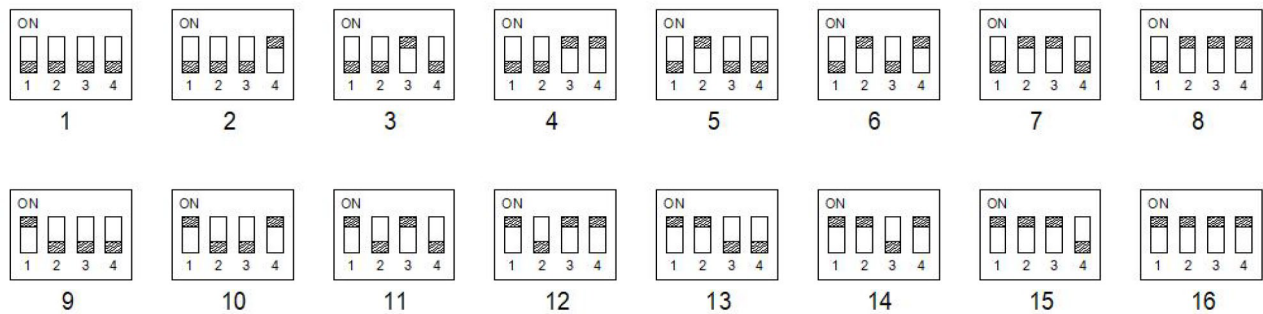


Figure 2-5 Address of dialing switch

 Explain

- The default factory address of the energy storage converter power module is 1.
- Different hardware addresses should be set for the parallel operation of multiple modules. If the hardware address setting of two modules is the same, the module address will be conflicting and cannot be identified correctly. This further affects the normal operation of the module.

The indicator light consists of a power indicator (POWER) and a status indicator (STATUS).

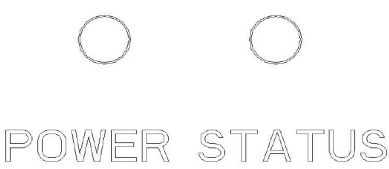


Figure 2-6, the indicator light

Table 2-3 indicator light instructions

pilot lamp	state	State description
Power supply indicator light (red)	Often bright	Normal state, the module has no fault
	twinkle	Module failure, please refer to the fault list for more details
Status indicator light (green)	Often bright	The module is operating normally
	twinkle	The module enters the program burn mode

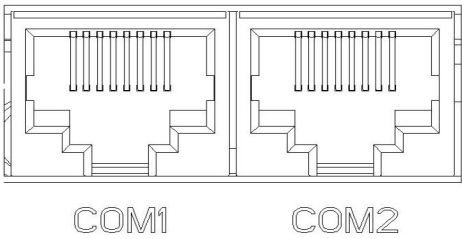


Figure 2- 10 The RJ 45 interface

RJ 45 There are two interfaces, the two are in parallel, and the module communicates through the interface. During the multi-module parallel machine, the interface of each energy storage module should be connected with the interface of another module through the parallel communication line. Each RJ 45 interface has 1 to 8 feet from left to right, and each pin is defined as follows:

Table 2-7 Description of the RJ 45 interface

order number	definition
1	CAN -H
2	CAN -L
3	N /A
4	N /A
5	N /A
6	N /A
7	GND (CAN)
8	GND (CAN)

 explain

*The parallel machine communication line is shipped together with the energy storage module.

1.5.2., Description of the low -pressure side interface

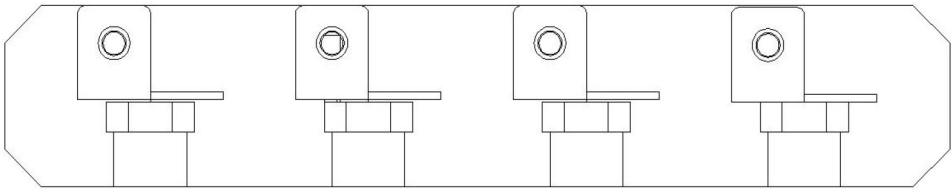


Figure 2- 11 Low-voltage side interface

The low-voltage side interface is connected by the bronze medal, and the access cable is fixed with M6 screws. From left to right are DC2-, DC2 +, DC 1-and DC 1 +.

 explain

- The maximum current of two DC ports is 80A.
- If only one port is used, it must be connected to DC 1, otherwise the device may not work properly.

1.5.3., Description of the high-pressure side interface

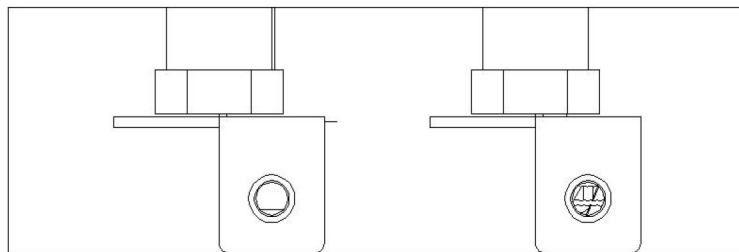


Figure 2-12, the DC interface

The DC interface is connected by the bronze medal, and the DC access interface is fixed with M 6 screws. Values from left to right are DC-and DC +.

1.5.4. Description of parallel interface

Multi-module parallel machine connects the interface of each module to the interface of another module.

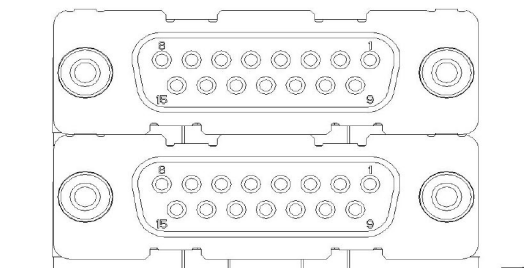


Figure 2-13, parallel interface

 explain

* Multi-module integration shall ensure that the interface interface is well connected, otherwise abnormalities may occur during the multi-module operation.

1.6. Install the energy storage module

installation size

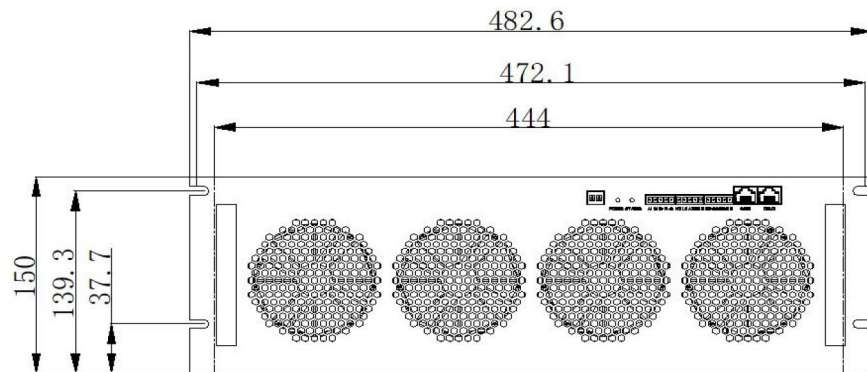


Figure 3-1 Product installation dimensions (in mm)

Installation steps

 explain

* Make sure that all the mounting holes in the panel are secured by the screws.

Step 1 Slowly push the module into the slot.

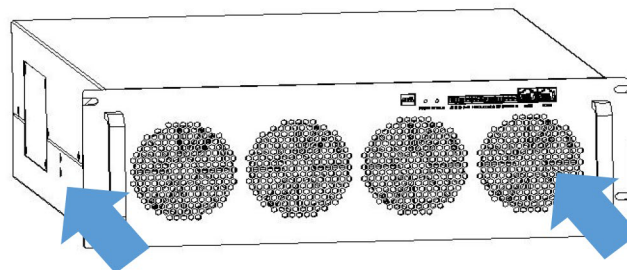


Figure 3-2 Installing the module

Step 2 Tighten and tighten the screws around the panel.

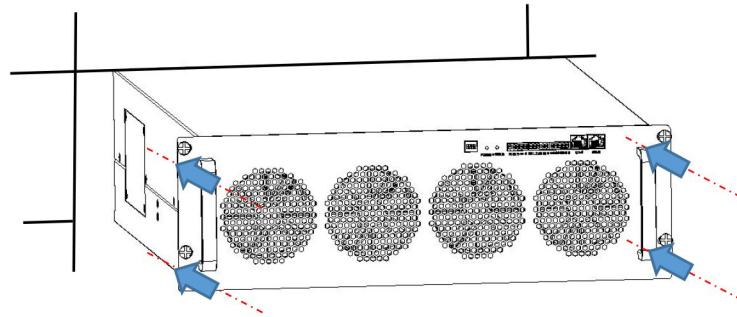


Figure 3-3 Tighten the module

----finish

 explain

- Install the module grounding terminal well when the module is installed independently.