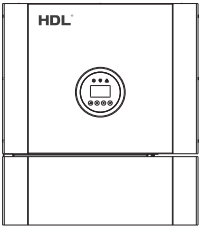


Single-phase Inverter 3KW

Datasheet



GSE MIS3680D.1

Please read the datasheet carefully before use!

Overview

Single-phase inverter 3KW (hereinafter referred to as the ‘product’ or ‘equipment’) is an electrical equipment which converts DC voltage, almost from batteries, into standard household AC voltage so that it is able to be used by common appliances. Together use with the specific battery module, the product can be applied in DC-coupled systems (mostly new installation), AC-coupled systems (mostly retrofit) and Hybrid-coupled systems (mostly retrofit, and PV capacity-increase).

After installation and proper commissioning, via mobile App, end users can proceed quick start-up for the product. Further, end users can check the equipment status and carry on information management.



App Download

Features:

1. High conversion efficiency and fast start-up
2. Strong adaptability and stability with load
3. Remotely power-on & off via cloud platform & mobile App
4. Three basic modes for end users to check via mobile App / the display screen of the product, including SELF CONSUME, BATTERY PRIORITY, PEAK SHIFT.

Note: The illustrations in this datasheet are for reference only and the actual product should prevail.

Appearance

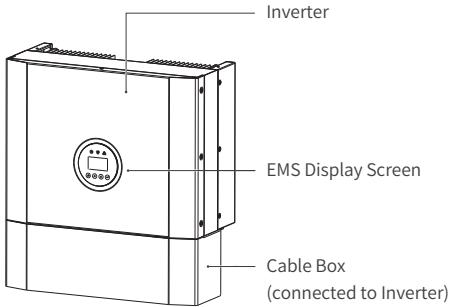


Figure 1

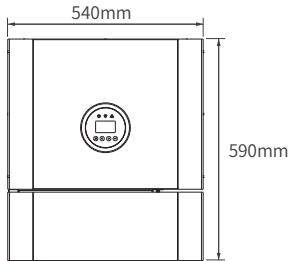


Figure 2

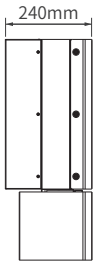


Figure 3

Technical Data

Overvoltage category	II (PV); III (MAINS)
PV terminal	
Max. PV input voltage	580Vd.c.
Max. PV input current	15Ad.c./15Ad.c.
Max. PV input power	4800W
Full load voltage range	165Vd.c.-520Vd.c.
MPPT voltage range	80Vd.c.-560Vd.c.
Isc PV	18Ad.c./18Ad.c.
Battery terminal	
Battery type	Lithium or lead-acid batteries
Battery voltage range	48Vd.c.
Max. charge current	50Ad.c.
Max. charge power	3000W
Max. discharge power	4000W
On-grid terminal	
Max. AC input power	7360VA
Max. AC input	230Va.c., 50/60Hz, Max. 32Aa.c.
Max. AC output power	3680W
Max. AC output apparent power	3680VA

Technical Data

On-grid terminal	
Max. AC output	230Va.c., 50/60Hz, Max. 16Aa.c.
Power factor range	0.8 leading to 0.8 lagging
Back-up terminal	
Rated AC output power	3680W
Max. AC apparent power	4000VA
Max. AC output	230Va.c., 50/60Hz, Max. 16Aa.c.
Protection	
Anti-islanding protection	Yes
DC reverse polarity protection	Yes
String fault detection	Yes
AC/DC surge protection	DC Type II; AC Type III
Insulation detection	Yes
General parameters	
Protective class	I
Ambient temperature range	-25°C ~ +60°C
IP degree	IP65
Isolated method(solar)	Transformerless
Isolated method(battery)	HF

Technical Support

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Website: <https://www.hdlautomation.com>

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◆ Specifications

Dimensions (W X H X D)	540×590×240mm (See Figure 2 & 3)
Net weight	33KG
Gross weight	38KG
Noise level (dB)	<25dB
Cooling type natural	Natural Convection
Max. Operation altitude	2000m
Operation humidity	0 ~ 95% (No Condensation)
Topology	Battery Isolation
Communication	RS485
Display	LCD / Mobile App
Certification & Standard	IEC/EN62109-1&2; IEC/EN61000-6-1; IEC/EN61000-6-2; EN61000-6-3; IEC/EN61000-6-4; IEC/EN61000-3-11; EN61000-3-12; IEC60529; IEC60068; IEC61683; IEC62116; IEC61727; EN50549-1; AS 4777.2; NRS 097; VDE-AR-N-4105; CE10-21; G98; G99; C10/C11

◆ Safety Precations



- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- Danger to life due to high voltages of the PV array, battery and electric shock. When exposed to sunlight, the PV array generates dangerous DC voltage which will be present in the DC conductors and the live components of the product. Touching the DC conductors or the live components can lead to lethal electric shocks. If you disconnect the DC connectors from the product under load, an electric arc may occur leading to electric shock and burns.
- Do not touch uninsulated cable ends.
- Do not touch the DC conductors.
- Do not wipe the product with damp cloth.
- Have the product installed and commissioned by qualified people with the appropriate skills only.
- Prior to performing any work on the product, disconnect the product from all voltage sources.



- 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.

◆ Safety Precations



- 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.
- Do not touch the product with wet hands.
- Do not put any heavy objects on top of the product.
- Do not damage the product with sharp objects.
- Do not install or operate the product in potentially explosive atmospheres or areas of high humidity.
- Do not mount the product in areas containing highly flammable materials or gases.
- If moisture has penetrated the product (e.g. due to a damaged enclosure), do not install or operate the product.
- Do not move the product when it is already connected with battery modules.



- Risk of injury through lifting or dropping the product. The product is heavy. There is risk of injury if the product is lifted incorrectly or dropped during transport or when attaching to or removing from the wall.
- Lifting and transporting the product must be carried out by more than 2 people.
- To ensure the electrical parameters to match requirements, related measuring equipment are required when the product is being connected or tested. Ensure that the connection and use matched specification to prevent electric arcs or shocks.

For detailed information, please refer to the provided user manual.

◆ Installation

- ⚠ DANGER: Prior to performing installation on the product, disconnect the product from all voltage sources.
- For detailed information about installation site and environment, as well as the installation for battery module assembled with the product, please refer to the provided user manual.

The product is outdoor version and can be installed in an outdoor or an indoor location. The mounting location must allow free access to the equipment for installation and maintenance purposes, and the EMS display screen must not be blocked.

If the product is mounted at a wall or at a distance of 300mm from the wall or the structure separating it from the habitable space, the distances to other structures or objects must be increased. The following distances must remain free:

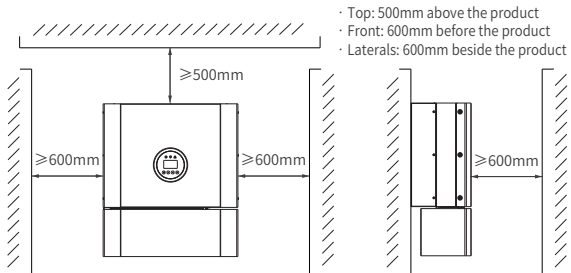
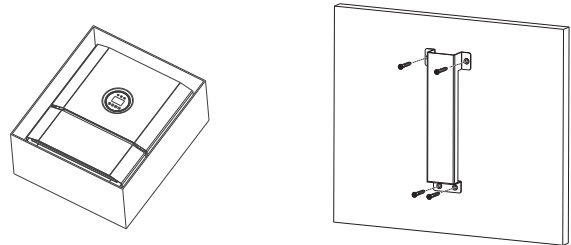


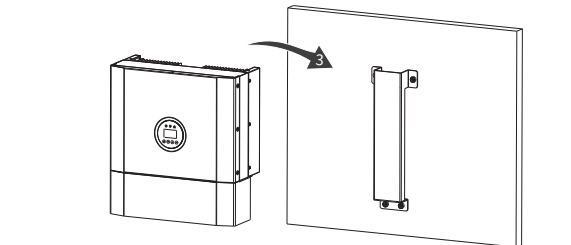
Figure 4

◆ Installation

- ⚠ CAUTION: Lifting and transporting the product must be carried out by more than 2 people.



1. Remove the product from the packaging box.
2. Fix the mounting panel to the wall.



3. Hang the product onto the mounting panels.
4. Adjust the entire product and ensure that the product has been securely hung onto the panel.

◆ Wiring

- For detailed information, please refer to the provided user manual.

◆ Quick Start

- For detailed information, please refer to the provided quick start guide.

◆ Mobile App

- For detailed information, please refer to the provided user manual.

◆ Packing List

Single-phase Inverter 3KW*1
For detailed information about other parts, please refer to the provided user manual.

- ⚠ Note: After unpacking, please check if the product and the parts are complete.