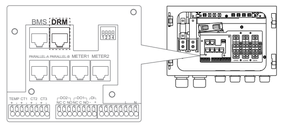
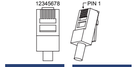
### 3.8 DRM Control (For Australia)

1. When connecting the communication cable, please ensure that the wiring port definition is completely matched with the equipment, and the cable route shall avoid the interference source, power cable, etc. to avoid affecting the signal receiving.
2. The communication cable between DRM and inverter can be connected with standard RJ45 crystal head, and the port definition is as follows:



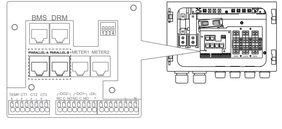


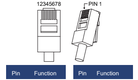

| Pin | Function | Pin | Function |
|---|---|---|---|
| 1 | DRM1/5 | 5 | DRM_REF |
| 2 | DRM2/6 | 6 | DRM_GND |
| 3 | DRM3/7 | 7 | NC |
| 4 | DRM4/8 | 8 | NC |

### 3.9 Parallel Communication

1. When connecting the communication cable, please ensure that the wiring port definition is completely matched with the equipment, and the cable route shall avoid the interference source, power cable, etc. to avoid affecting the signal receiving.
2. The communication cable between inverter and inverter can be connected with standard RJ45 crystal head, and the port definition is as follows:



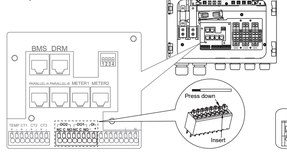


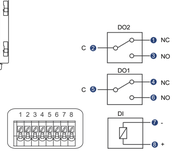




| Pin | Function | Pin | Function |
|---|---|---|---|
| 1 | CANB_H | 5 | PAR-HOST |
| 2 | CANB_L | 6 | PAR-MODE |
| 3 | GND/COM | 7 | PAR.CAN_H |
| 4 | PAR-SYN | 8 | PAR.CAN_L |

### 3.10 DRY Communication

1. When connecting the communication cable, please ensure that the wiring port definition is completely matched with the equipment, and the cable route shall avoid the interference source, power cable, etc. to avoid affecting the signal receiving.
2. The port definition is as follows:



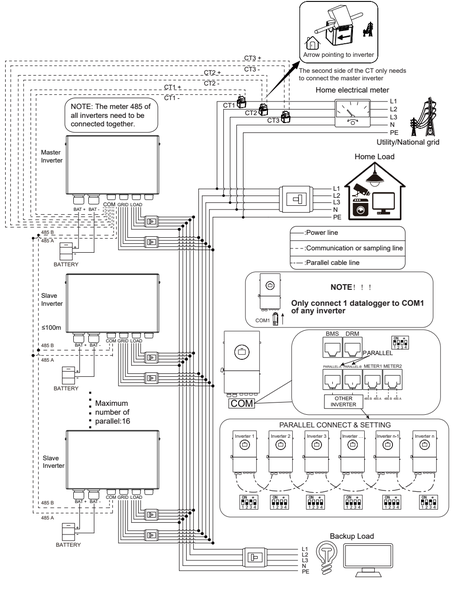







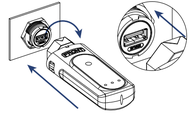
## 4. PARALLEL SYSTEM CONNECTION

Note: This picture shows the CT connection, see the page 28 of the user manual for the CT meter connection and the DC meter connection.




## 5. INSTALLATION OF DATALOGGER (OPTIONAL)

1. Open the COM1 port cover plate, assemble the datalogger and USB port together as shown in the figure, and tighten the datalogger.
2. The datalogger can support Wifi communication. Refer to the datalogger installation guide for detailed operation.



## 6. INSPECTION BEFORE OPERATION

| No. | Inspection items |
|---|---|
| 1 | The inverter shall be installed correctly, firmly and reliably |
| 2 | Cables shall be reasonably arranged and well protected, without damage |
| 3 | The datalogger shall be installed correctly, firmly and reliably |
| 4 | The safety signs and warning labels on the inverter are not blocked or damaged |
| 5 | "DC SWITCH" and all switches connected to the inverter are "OFF" |
| 6 | The AC output cable, DC input cable and grounding wire are connected correctly, firmly and reliably |
| 7 | Unused terminals and interfaces are protected with waterproof covers |
| 8 | Reasonable selection of AC circuit breaker |
| 9 | Reasonable installation space, clean and tidy environment, no construction remains |

## 7. POWER ON THE SYSTEM

1. At the AC switch between the inverter and the power grid, measure the voltage at the power grid side with a multimeter to confirm that the voltage of the power grid is within the allowable range of the inverter operating voltage.
2. Turn on the AC switch for the power grid.
3. Confirm that the photovoltaic panels comply with the specifications of the inverter, and turn on the "DC break" on the inverter.
4. Ensure that the battery model matches the inverter model. If there is a circuit breaker for the battery, turn it on first and then activate the battery. If there is no such circuit breaker, activate the battery directly.
5. Observe the inverter LCD/LED indicator and check the inverter operation status.

The registered account and password can be logged in at the same time on the APP and the website, or on multiple devices. This is a quick installation manual. If you do not know the specific operation, please contact our After-sales personnel.

TBEA

**TBEA Xi'an Electric Technology Co., Ltd.**

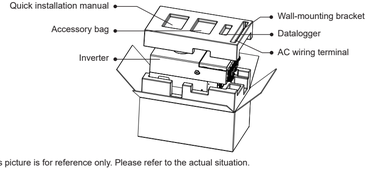
No. 70, Shanglinyuan 4th Road, High-tech Development Zone, Xi'an, Shaanxi, China

TBEA

# QUICK INSTALLATION MANUAL

**TH(5~12)K-TLA01**

Before opening the inverter package, check the outer package for damage. Open the package and check the inverter for damage of exterior or missing accessories.
The attachments are placed as follows:




This picture is for reference only. Please refer to the actual situation.

| No. | Description | Model | Unit | QTY | Remark |
|---|---|---|---|---|---|
| 1 | Inverter | | pcs | 1 | |
| 2 | Quick installation manual | | pcs | 1 | |
| 3 | Self tapping screws+expansion bolts | ST8×40+M12×60 | set | 2 | |
| 4 | Wall-mounting bracket | | pcs | 1 | |
| 5 | Combination screws | M5×12 | pcs | 2 | |
| 6 | Inspection report | | pcs | 1 | |
| 7 | PV terminals (+, -) | | pair | *1 | black |
| 8 | Ground wire OT terminal | | pcs | *2 | |
| 9 | Datalogger | | pcs | 1 | optional |
| 10 | Meter kit | | set | 1 | optional |
| 11 | Parallel cable | CAT5e | pcs | 1 | |
| 12 | Current transformer | | pcs | 3 | |

*1 The number of PV terminals allocated corresponds to the number of specific inverter terminals.
*2 The number of Ground wire OT terminal dispatched is subject to the actual BOM.

# 1. INSTRUCTIONS FOR USER

1. The contents of this document will be updated irregularly due to product version upgrading or other reasons. This document is only an installation guide and does not replace the user manual or the safety instructions on the product.
2. All equipment operations must be performed by professional electrical technicians.
3. Please read the user manual carefully for product information and safety precautions before installing the equipment. Equipment damage due to storage, handling, installation and use of equipment not in accordance with this document and the user manual is not covered by the equipment warranty.
4. Insulating tools must be used when installing equipment. For personal safety, please wear personal protective equipment.

# 2. INSTALLATION OF INVERTER

If the installation space does not meet the requirements, the inverter may be derated.

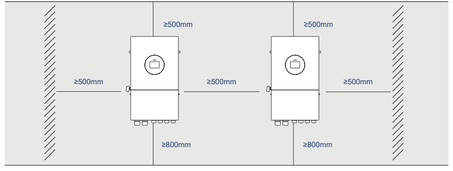



Fig. 2.0 Installation Clearance of Inverter

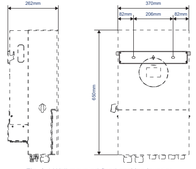



Fig. 2.1 Wall mounted fixed position inverter

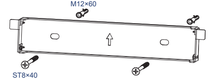



Fig. 2.2 Wall mounted bracket

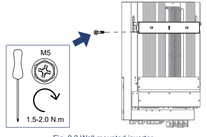



Fig. 2.3 Wall mounted inverter

1. Select the mounting height of the support and mark the mounting holes according to Figure 2.2. For brick walls, the holes must be drilled to fit the expansion bolts.
2. Confirm that the installation hole position is correctly marked, the support is horizontal, punch holes at the marked position, and drive the expansion pipe into the installation hole.
3. Lift the inverter and align the rear bracket of the inverter with the convex of the mounting bracket. Hang the inverter on the mounting bracket and make sure it is secure (see Figure 2.3).
4. Lock the inverter in the mounting bracket using the M5 screws of the accessory.

# 3. ELECTRICAL CONNECTION

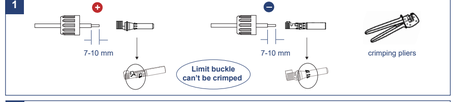
## 3.1 Preparation before installation

1. Before making electrical connections, make sure that the inverter's "DC SWITCH" and all switches connected to the inverter are in the "OFF" position, otherwise the high voltage of the inverter may cause electrical shock.
2. In order to ensure that the inverter and the grid can be safely disconnected in case of abnormal conditions, please connect the AC switch on the AC side of the inverter. Please select proper AC switch according to local industry standards and regulations.
3. Electrical connections shall comply with the regulations of the country where the equipment is located.

| Cable Requirements | | |
|---|---|---|
| Cable type | Wire cross section ( mm² ) | |
| | Range | Recommended value |
| PV input cable | 4.0 - 6.0 ( 12 - 10AWG ) | 4.0 ( 12AWG ) |
| Battery cable | 67.4 ( 00AWG or 2*2AWG ) | 67.4 ( 00AWG ) |
| AC cable | 6.0 ( 10AWG ) | 6.0 ( 10AWG ) |

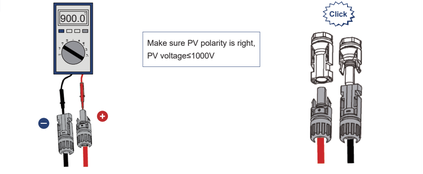
## 3.2 PV input side connection

1

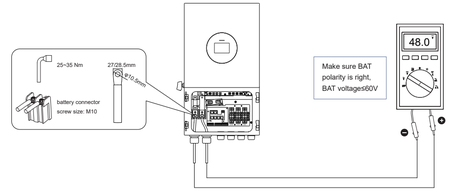



2


3



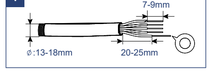

## 3.3 BAT input side connection



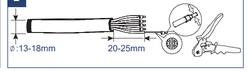

## 3.4 Connection of AC output side

**Warning:** During wiring, AC cable completely matches with "L1", "L2", "L3", "N" and ⏚ port of AC terminal. If the cable is connected improperly, the equipment will be damaged.

1

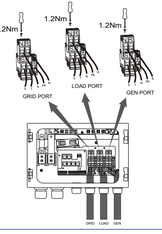



2

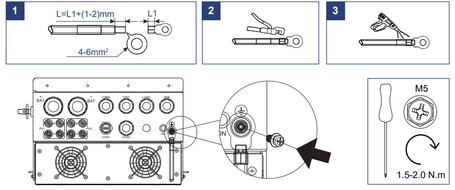



Note:
Single core wire, no terminal pressing operation required.
For multi-core wires, cold-pressed terminal crimping pliers shall be used for crimping terminals.

3

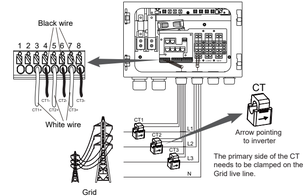



## 3.5 External earthing connection



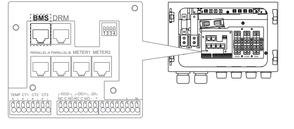

## 3.6 CT Connection

Note: when the reading of the load power on the LCD is not correct, please reverse the CT arrow.




## 3.7 BMS Communication

1. When connecting the communication cable, please ensure that the wiring port definition is completely matched with the equipment, and the cable route shall avoid the interference source, power cable, etc. to avoid affecting the signal receiving.
2. It is suggested that the communication cable between BMS and inverter should be ≤ 5m, and standard RJ45 crystal head can be connected. The port definition is as follows:




| Pin | Function | Pin | Function |
|---|---|---|---|
| 1 | 485B | 5 | CANL |
| 2 | 485A | 6 | GND |
| 3 | GND | 7 | 485A |
| 4 | CANH | 8 | 485B |

# （此页不打印）

印刷说明：

1、材料：图纸展开尺寸：725x205mm，铜版纸，157g，成品展开尺寸公差±5mm；

2、印刷要求：双面彩印，内容颜色正确清晰无重影,蓝色色号：PANTONE 287C C100 Y90 M38 K0；

3、来料方式：折叠来料，折叠方式如下图所示（仅供参考，以实物为准）：

（荷包折页法，从第五页开始依次按顺序内折,如图所示）