

TLogger 100-S

TBEA



Quick Installation Guide

V1.0.0

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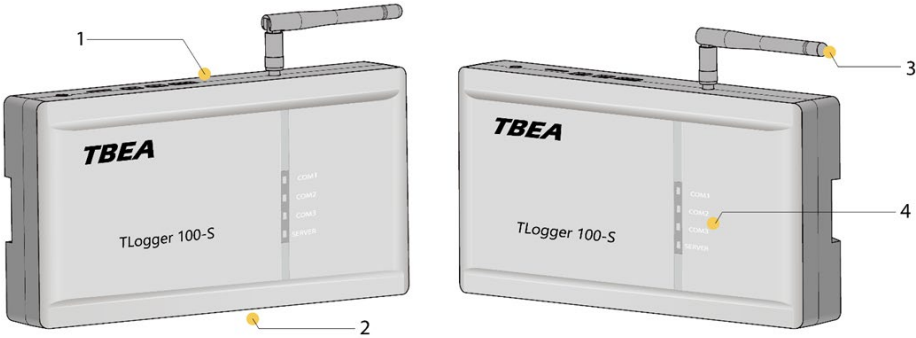
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1 基本信息

本手册主要介绍了产品信息、安装、操作及维护说明，以及用户界面的操作。在安装和操作产品之前，应了解本文档中提供的产品特性、功能和安全注意事项。您可以在<http://www.sunoasis.com.cn/>找到本手册的最新电子版以及有关产品的更多信息。本手册必须妥善保存在便于随时获取的地方。

2 概述



序号	名称	描述
1	上接线区	连接数字输出信号
2	下接线区	连接电源、RS485、以太网和数字输入信号
3	天线连接区域	连接 2.4G WLAN 天线
4	LED指示灯	指示TLogger 100-S当前的工作状态

3 安全须知

3.1 通用说明

该产品严格按照国家标准和行业标准进行设计和测试，仍可能存在残留风险。为防止人身伤害和财产损失并确保产品的长期运行，请仔细阅读本节并始终遵守所有安全信息。

3.2 重要安全说明



危险

损坏管线可能会造成人身伤害！

墙壁上可能布满电源线或其他线路（如煤气或自来水），钻孔时损坏管线可能导致人身危险。

- 钻孔时请确保不要损坏墙上的任何线路。

注意

静电放电会损坏产品。

静电释放可能会损坏TLogger 100-S的内部组件。

- 触摸TLogger 100-S任何组件之前，请先将触摸接地导体，以释放身体的静电。

3.3 电气标签上的安全符号



禁止将数据采集器与生活垃圾一起丢弃。



CE标志

数据采集器符合欧盟的EU指令。



查看文档

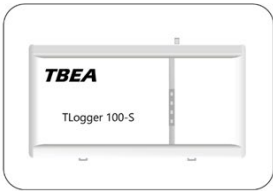
对数据采集器进行任何操作前，请阅读用户手册。



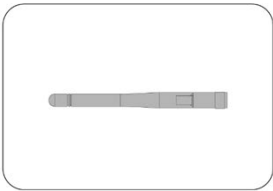
室内设备

该产品只能在室内使用。

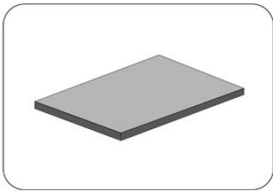
4 交货清单



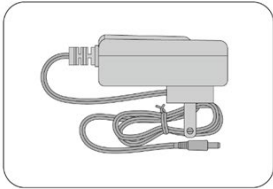
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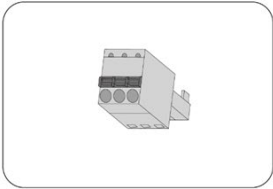
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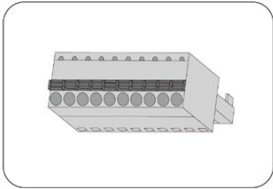
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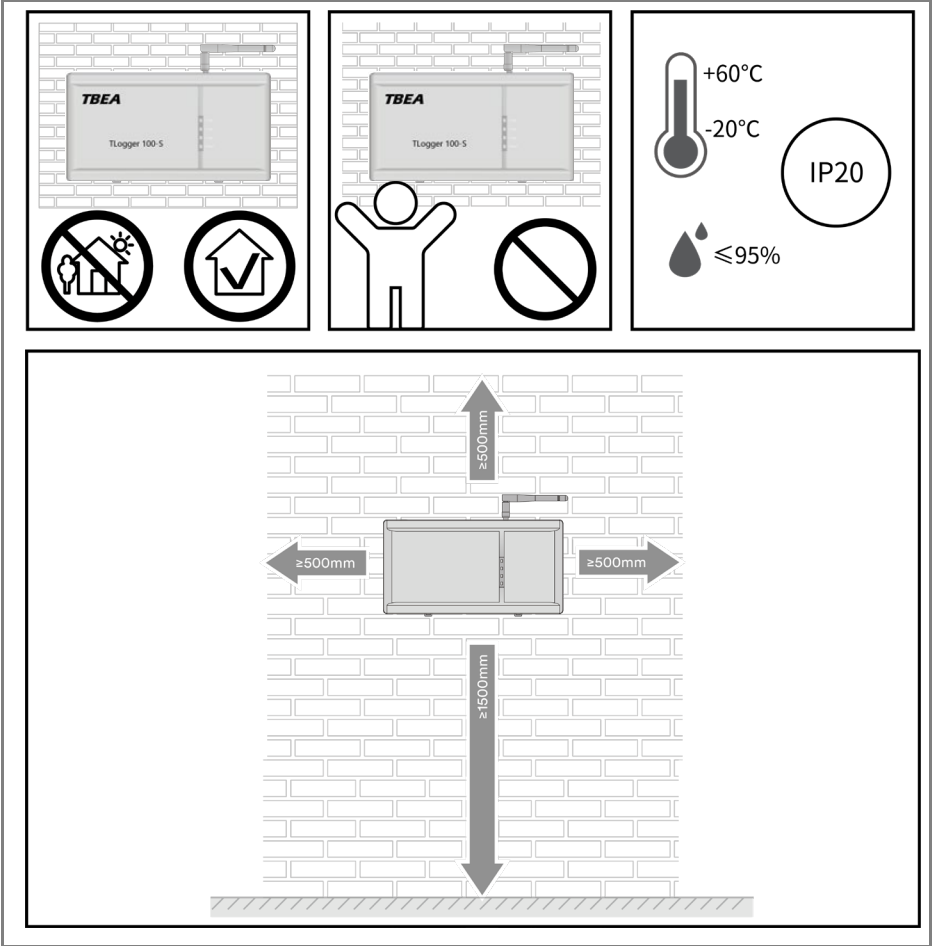
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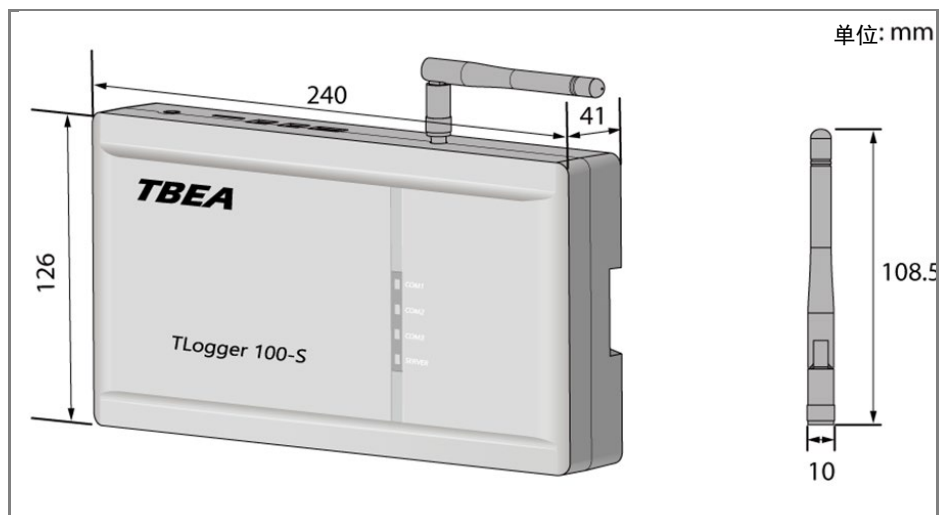
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序号	说明	数量
A	TLogger 100-S	1
B	天线	1
C	手册	1
D	电源适配器	1
E	接线端子（3 pin）	2
F	接线端子（10 pin）	1

5 安装环境

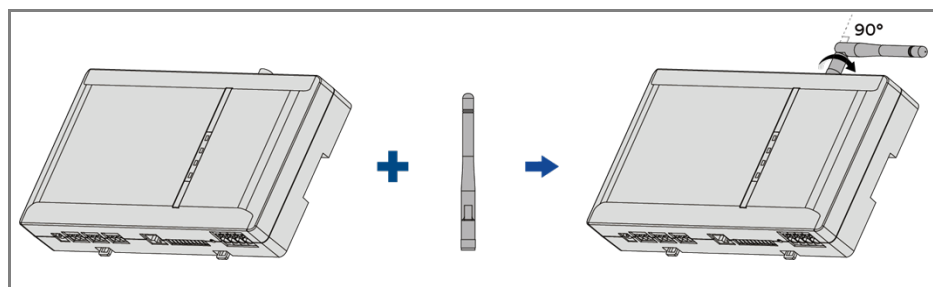


6 尺寸

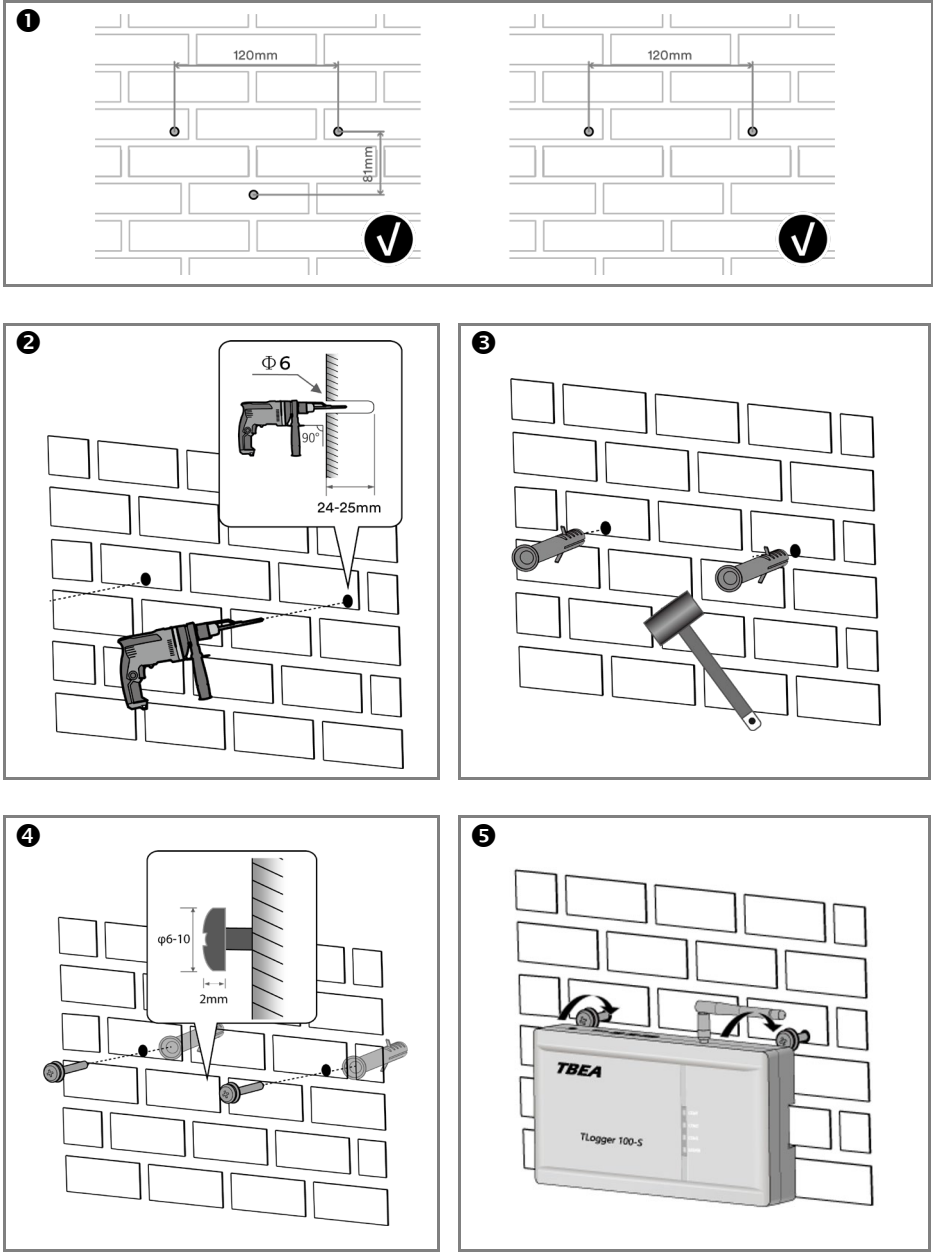


7 安装

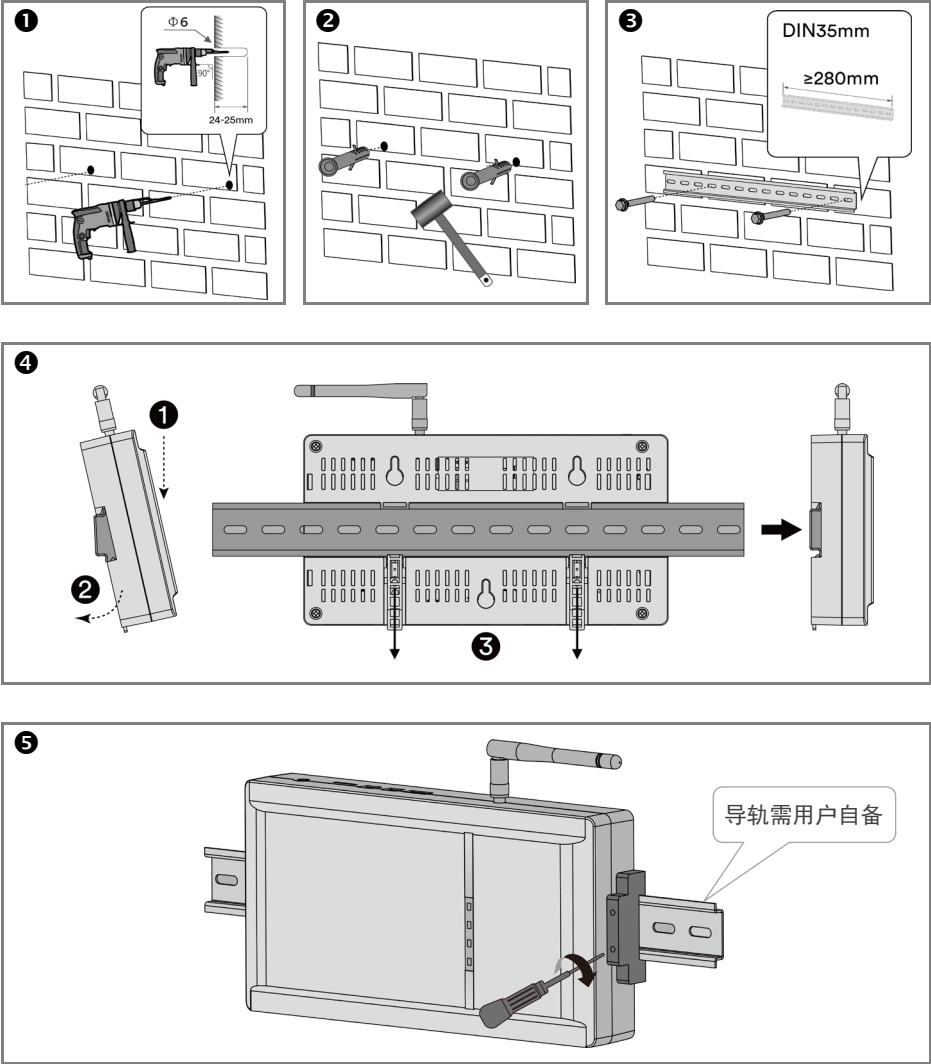
7.1 天线安装



7.2 背挂板安装



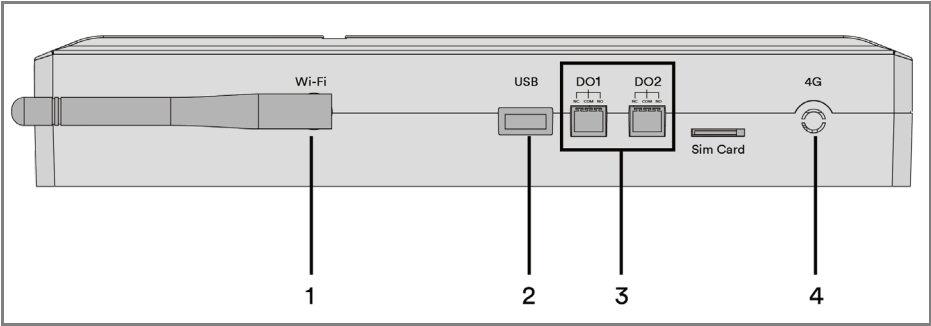
7.3 轨道安装



8 电气连接

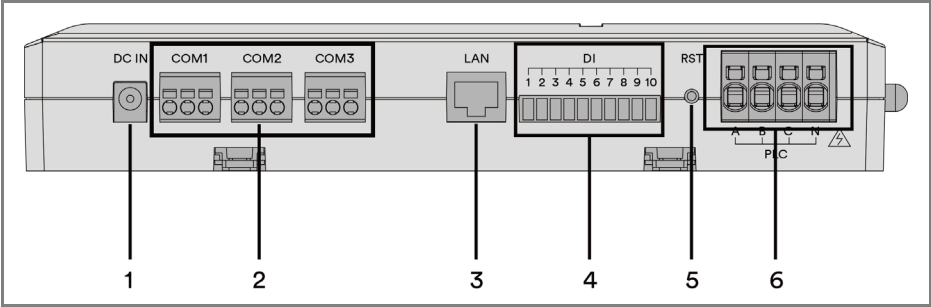
8.1 接面板介绍

• 俯视图



序号	名称	描述
1	Wi-Fi	外部WLAN 天线
2	USB	通过U盘升级固件或导出电站逆变器详细运行数据
3	DO1, DO2	数字信号输出（干接点）
4	4G	预留端口

• 底视图



序号	名称	描述
1	DC IN	电源插座，连接12V电源适配器。
2	COM 1, COM 2, COM 3	三个独立的RS485接口，连接光伏逆变器、智能电表、气象站和其他第三方设备。
3	LAN	以太网端口，连接以太网交换机或路由器。
4	DI	数字信号输入，连接纹波控制接收器或需求响应启用设备

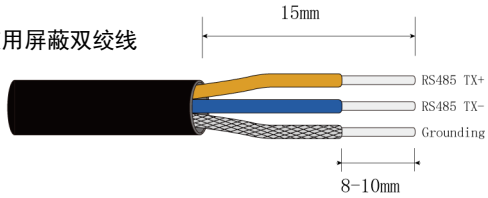
(DRED)。

5	RST	短按3秒即可重启。 长按直到所有灯闪烁即可重置（大约八秒）。
6	PLC	预留端口

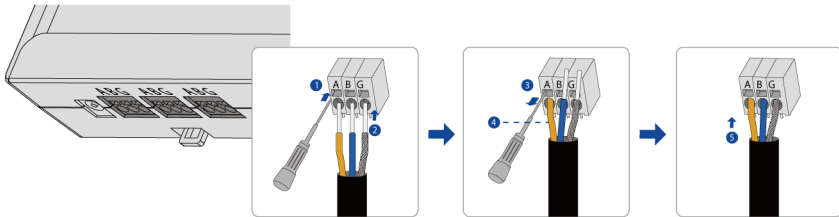
8.2 RS485 通讯连接

❶

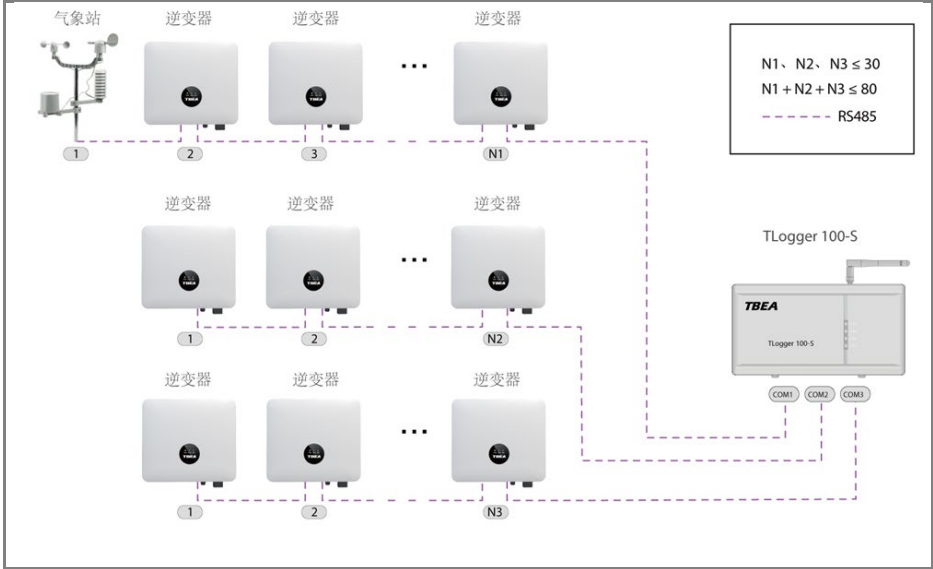
建议通讯线使用屏蔽双绞线



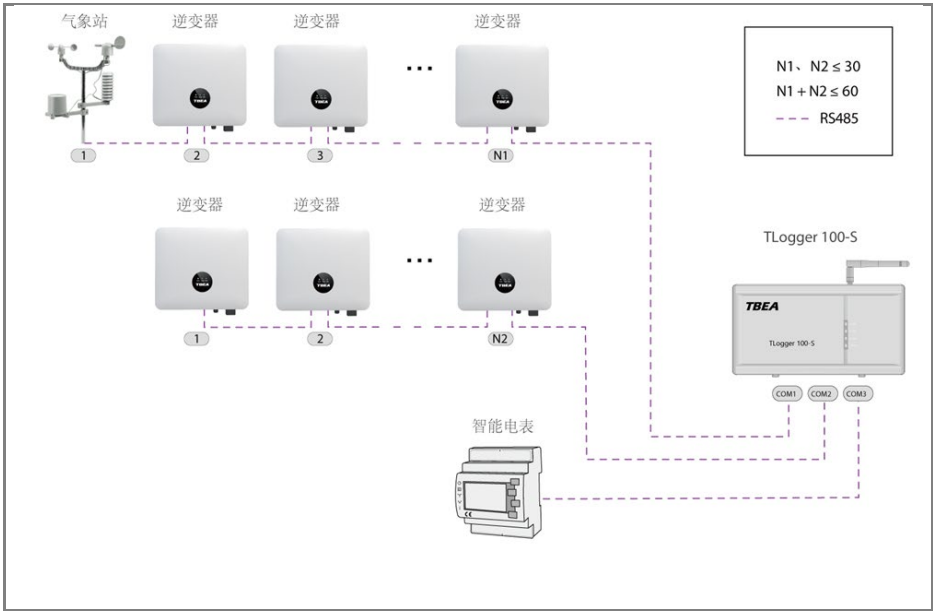
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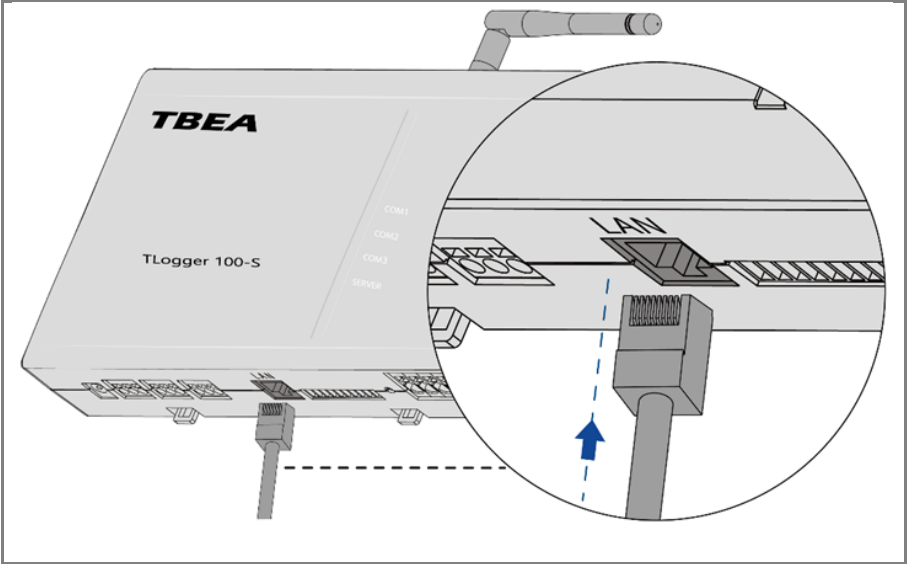
8.3 连接多个逆变器或气象站



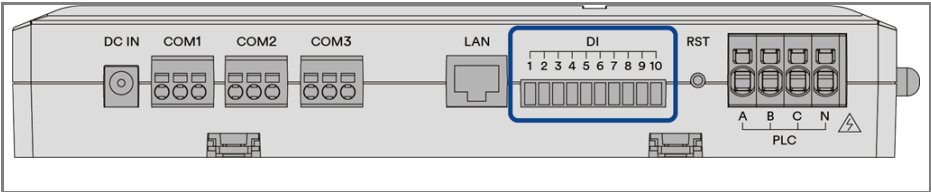
8.4 连接智能电表



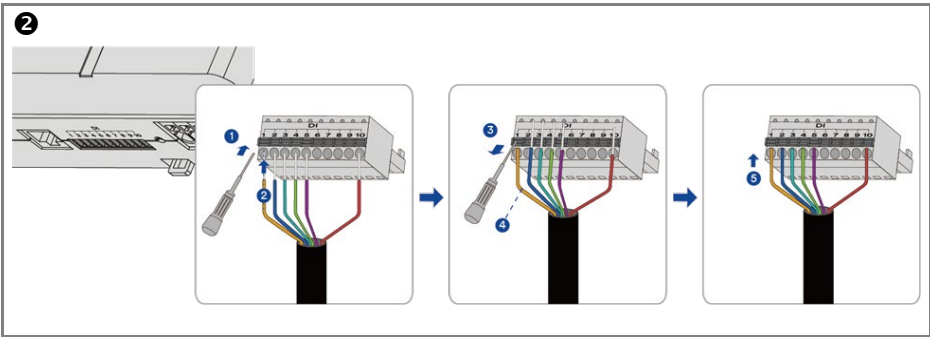
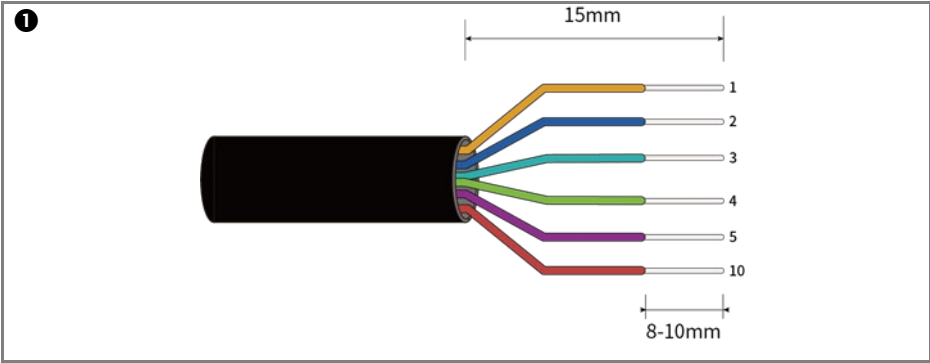
8.5 连接以太网



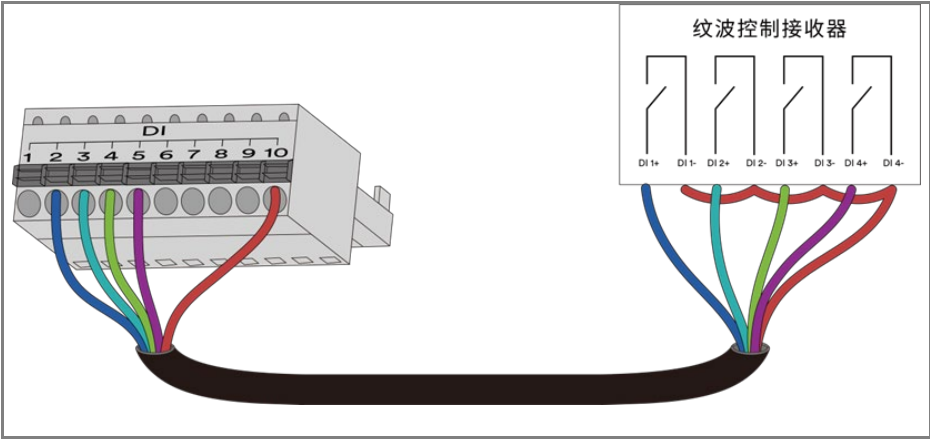
8.6 数字信号输入端子连接



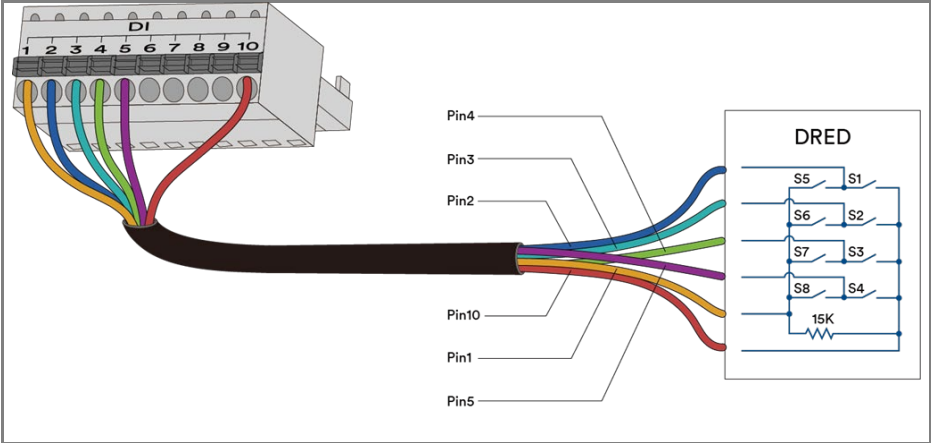
端口	功能	说明
1	VCC	DRED 的” REF GEN/0” 。
2	DI_1	“DRM1/5” 用于 DRED 或用于无功率控制 “D1” 。
3	DI_2	“DRM1/5” 用于 DRED 或用于无功率控制 “D2” 。
4	DI_3	“DRM1/5” 用于 DRED 或用于无功率控制 “D3” 。
5	DI_4	“DRM1/5” 用于 DRED 或用于无功率控制 “D4” 。
6	DI_5	“K1” 用于纹波控制接收器。
7	DI_6	“K2” 用于纹波控制接收器。
8	DI_7	“K3” 用于纹波控制接收器。
9	DI_8	“K4” 用于纹波控制接收器。
10	GND	“COM LOAD/0” 用于 DRED 或用于纹波控制接收器的公共 GND。



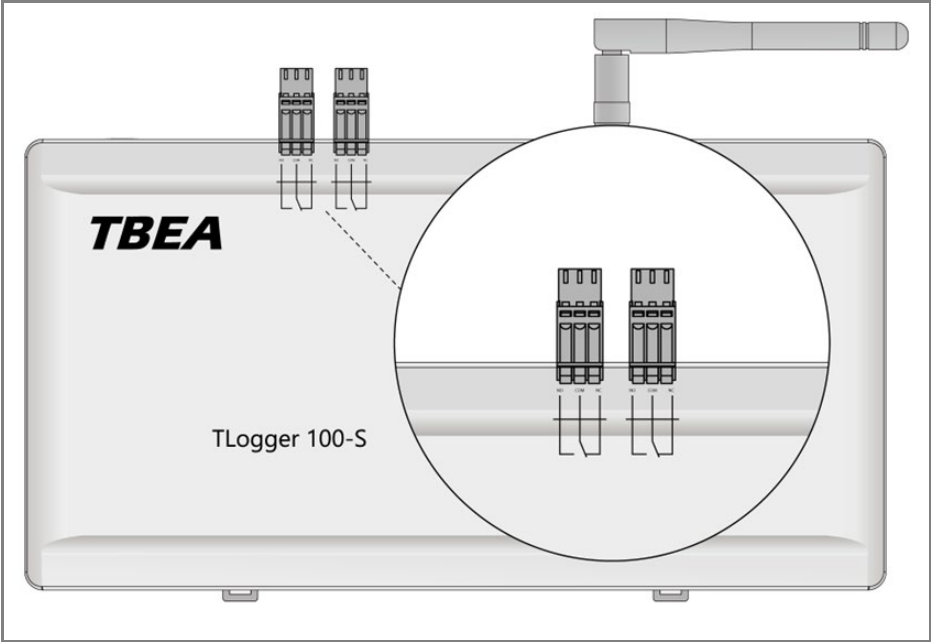
8.7 数字信号输入端子连接

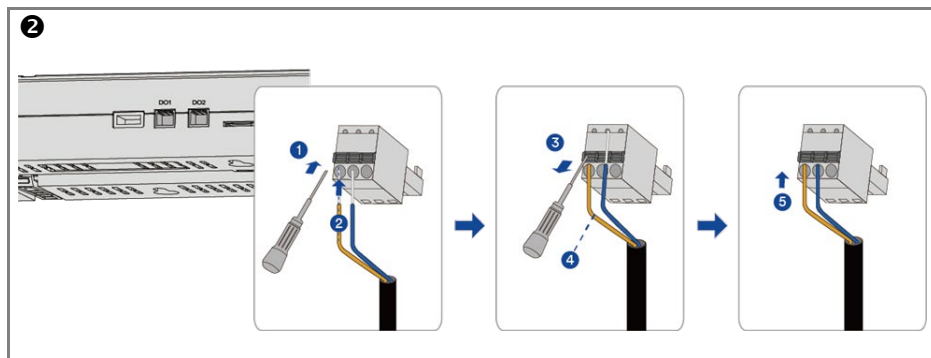
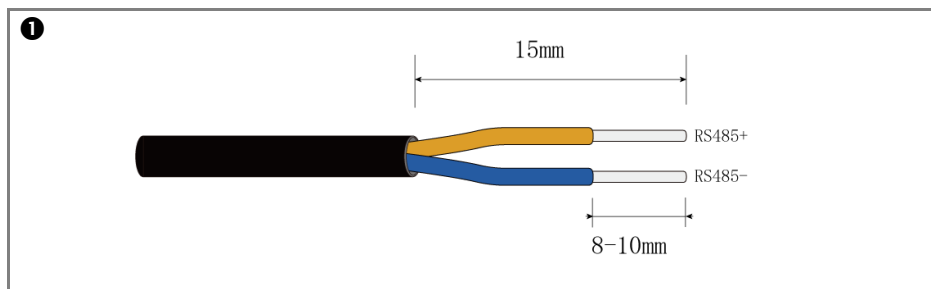


8.8 连接需求响应启用设备 (DRED)

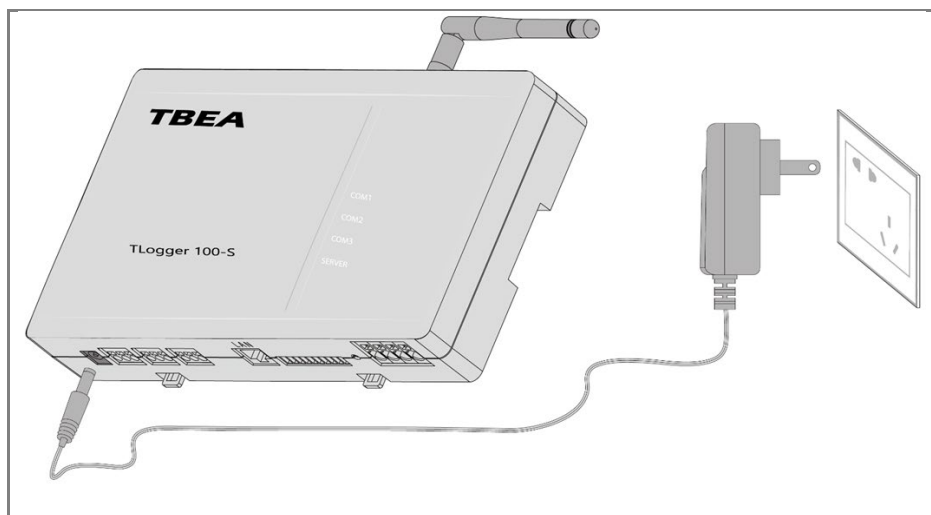


8.9 干接点输出接口连接





8.10 电源连接



1 GENERAL INFORMATION

This quick installation guide does not replace the description in the user manual. The contents of this guide may be updated or revised due to product development. The information in this guide is subject to change without notice. The latest version of this document and the manual for installation, commissioning, configuration and decommissioning are to be found in PDF format at <http://english.sunoasis.com.cn/>.

2 SAFETY

2.1 Intended use

The product is a highly integrated device dedicated for monitoring and managing the PV power system. It converges ports, converts protocols, collects and stores data, and centrally monitors and maintains devices in the PV power system.

The product is only suitable for indoor use.

The product can be used to data collection from various environment sensors, Smart Energy Meters, inverters, and other equipment.

The type label must remain permanently attached to the product.

This document does not replace any regional, state, provincial, federal or national laws, regulations or standards that apply to the installation, electrical safety and use of the product.

2.2 Important safety instructions

Before installing, operating, and maintaining the equipment, read this document and observe all the safety instructions on the equipment and in this document.



DANGER

Damage to cable lines can cause personal injury!

- The walls may be covered with power cords or other lines (for example, gas or water).
- Make sure that no lines on the wall are damaged when drilling.

NOTICE

Damage to the product due to electrostatic discharge.

Internal components of the product can be irreparably damaged by electrostatic discharge.

- Ground yourself before touching any component.

2.3 Symbols on the label



WEEE designation

Do not dispose of the product together with the household waste but in accordance with the disposal regulations for electronic waste applicable at the installation site.



CE marking

The product complies with the requirements of the applicable EU directives.



Observe the documentation

Observe all documentation supplied with the product.



In door equipment

The product can be only used in door.

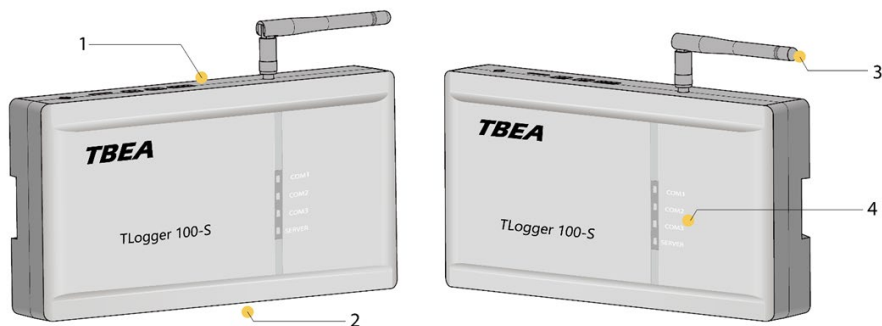
3 EU Declaration of Conformity

Within the scope of the EU directives

- Radio Equipment Directive 2014/53/EU (L 153/62-106. May 22. 2014) (RED)
- Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31, 2015) (RoHS) TBEA Xi'an Electric Technology Co., Ltd. confirms herewith that the product described in this manual are in compliance with the fundamental requirements and other relevant provisions of the above mentioned directives.

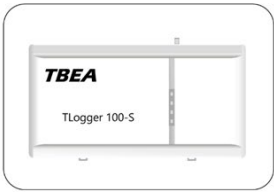


4 Overview

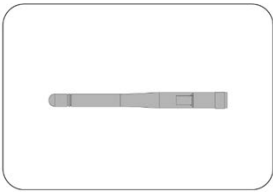


No.	Name	Description
1	Upper wiring area	Connect digital output signal.
2	Under wiring area	Connect power supply, RS485, Ethernet and digital input signal.
3	Antenna connection area	Connect 2.4G WLAN antenna.
4	LED indicator	Indicate the present working state of the TLogger 100-S.

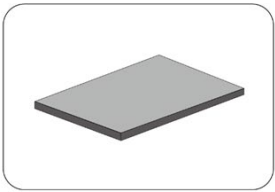
5 Scope of Delivery



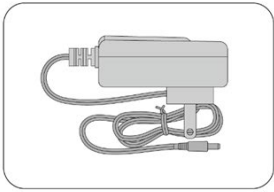
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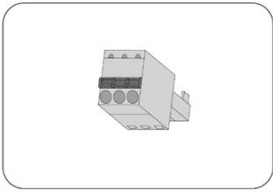
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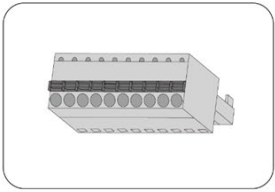
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D



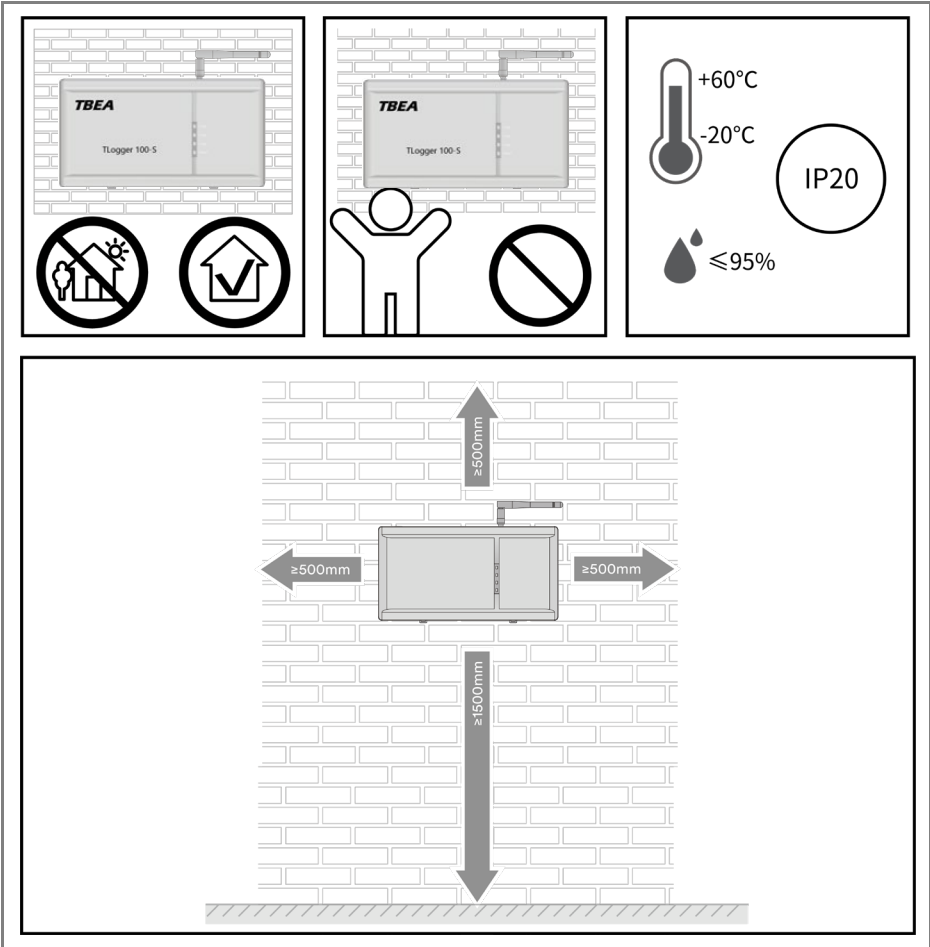
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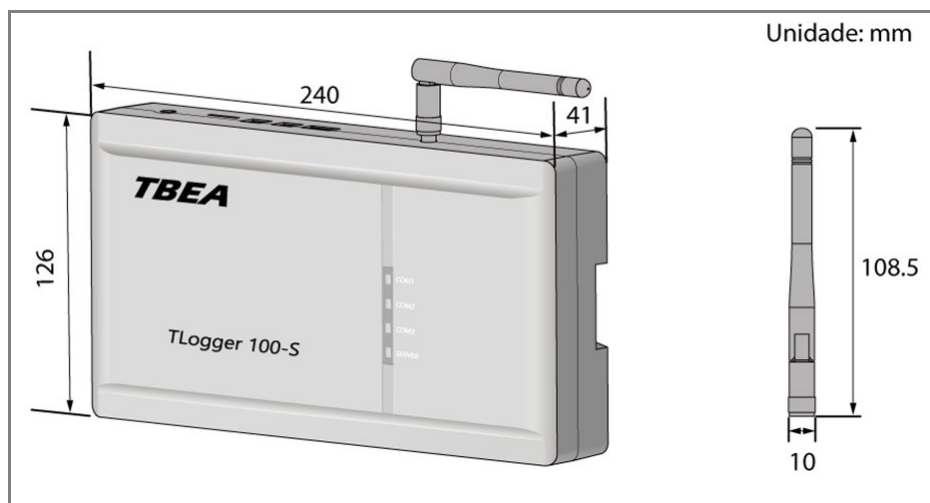
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NO.	Name	Quantity
A	TLogger 100-S	1
B	Antenna	1
C	Document package	1
D	Power adapter	1
E	Terminal (3 pin)	2
F	Terminal (10 pin)	1

6 Mounting Environment

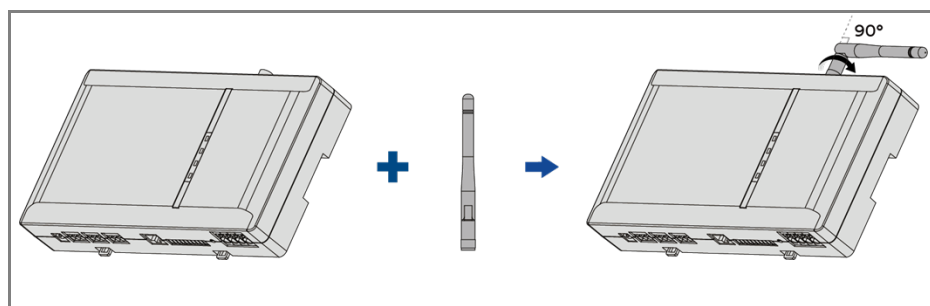


7 DIMENSIONS

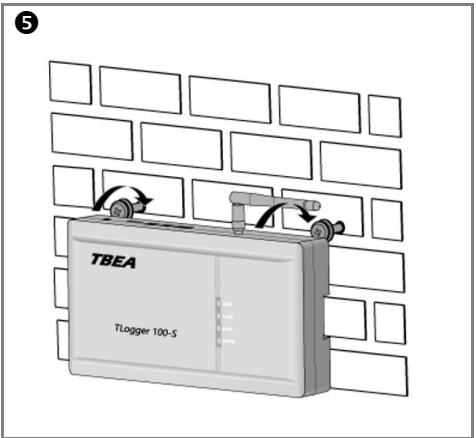
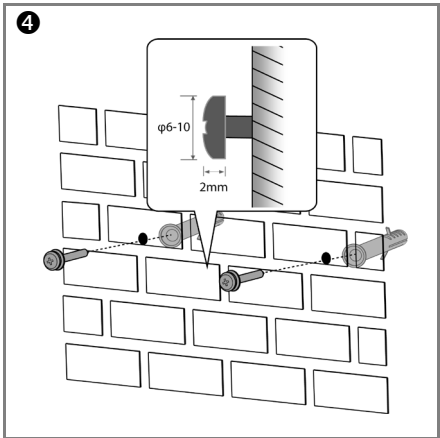
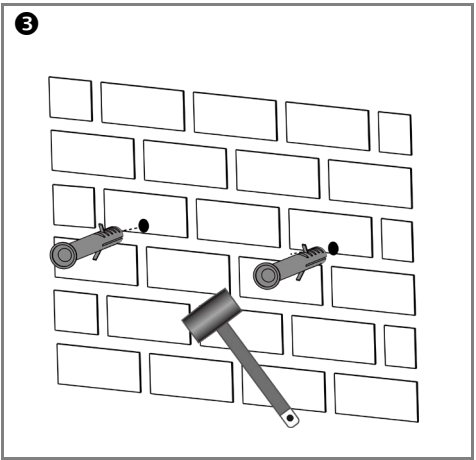
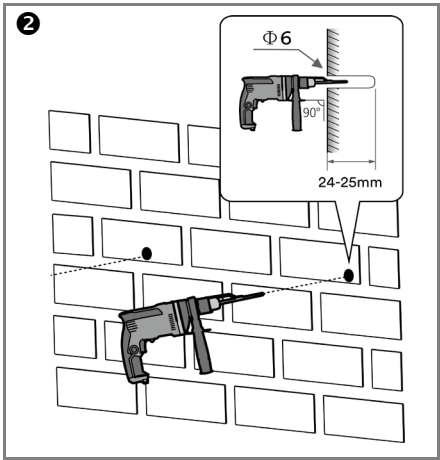
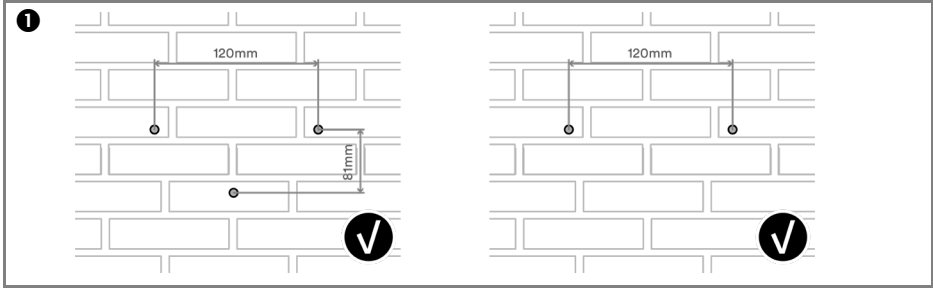


8 Mounting

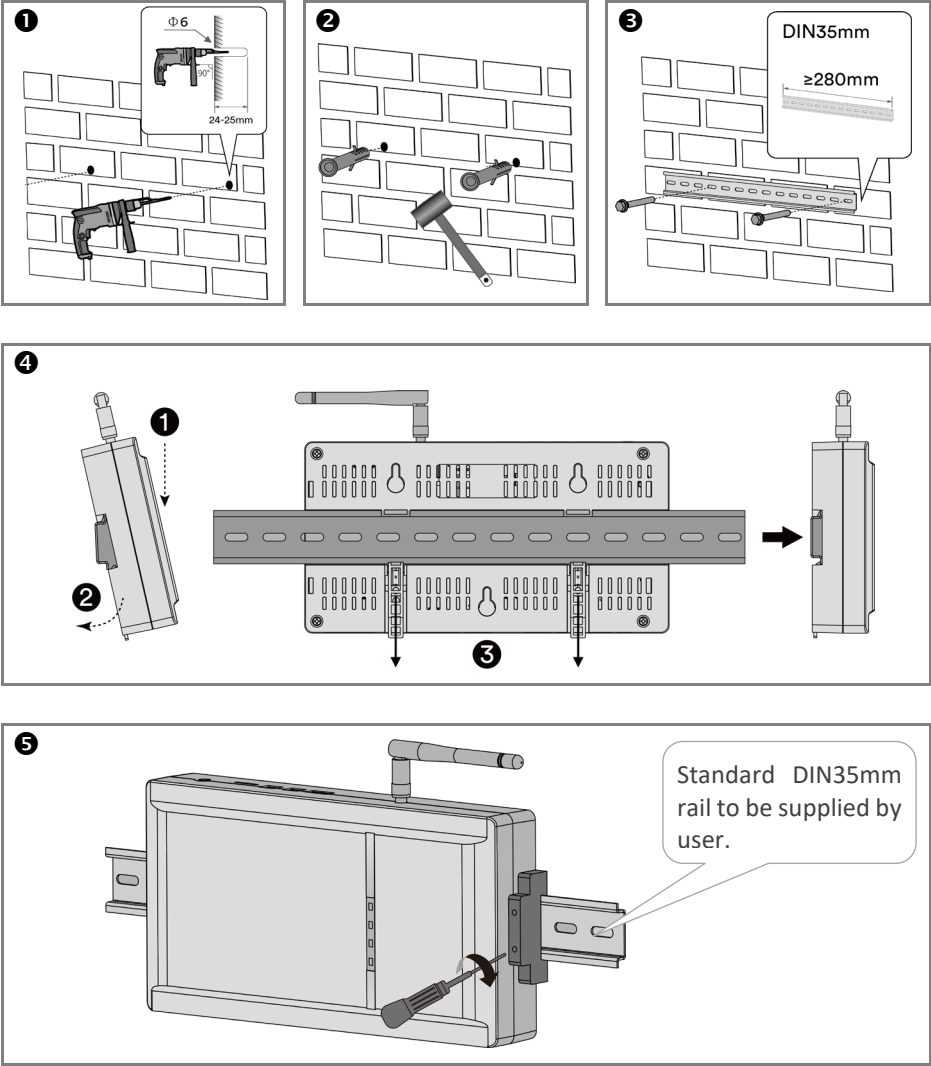
8.1 Installing antenna



8.2 Wall-Mounted Installation



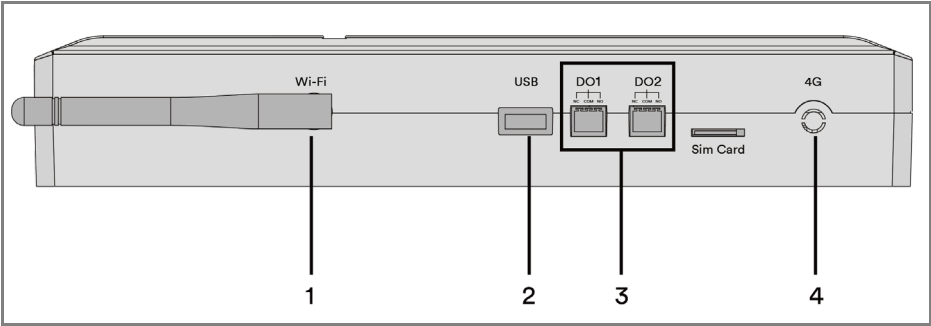
8.3 Rail installation



9 Electrical connection

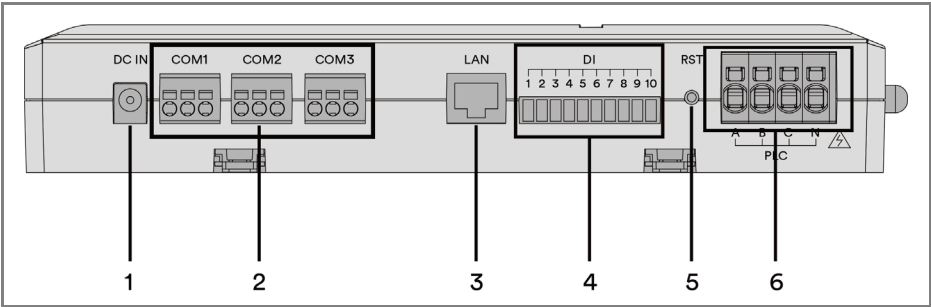
9.1 Overview of the connection area

- Top view



NO.	Name	Description
1	Wi-Fi	External WLAN antenna.
2	USB	Upgrade firmware or export detailed operating data of plant inverters via USB stick.
3	DO1, DO2	Digital signal output (Dry contact).
4	4G	Reserved port.

- Bottom view



NO.	Name	Description
1	DC IN	Power supply socket, connect to 12V power adapter.
2	COM 1, COM 2, COM 3	Three separate RS485 interfaces, connect to PV inverter, Smart meter, Weather station and the other third party device.
3	LAN	Ethernet port, connect to Ethernet switch or router.

4	DI	Digital signal input, connect to Ripple Control Receiver or Demand Response Enabling Device (DRED).
5	RST	Short press for three seconds to restart. Press and hold until all lights flash to reset (about 10 seconds)
6	PLC	Reserved port

9.2 RS485 cable connection

1

We recommend the use of shielded twisted pair cables.

15mm

RS485 TX+

RS485 TX-

Grounding

8-10mm

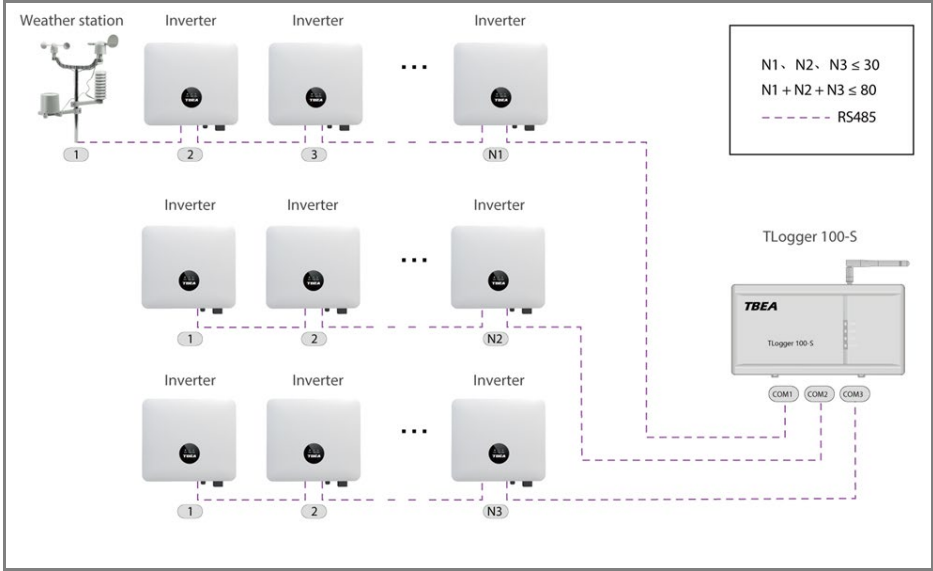
2

1

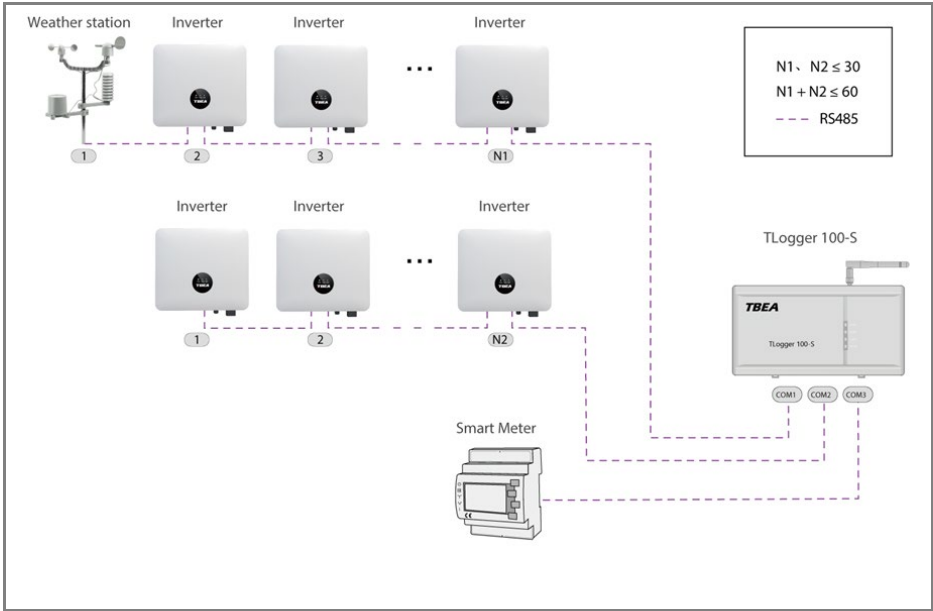
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3

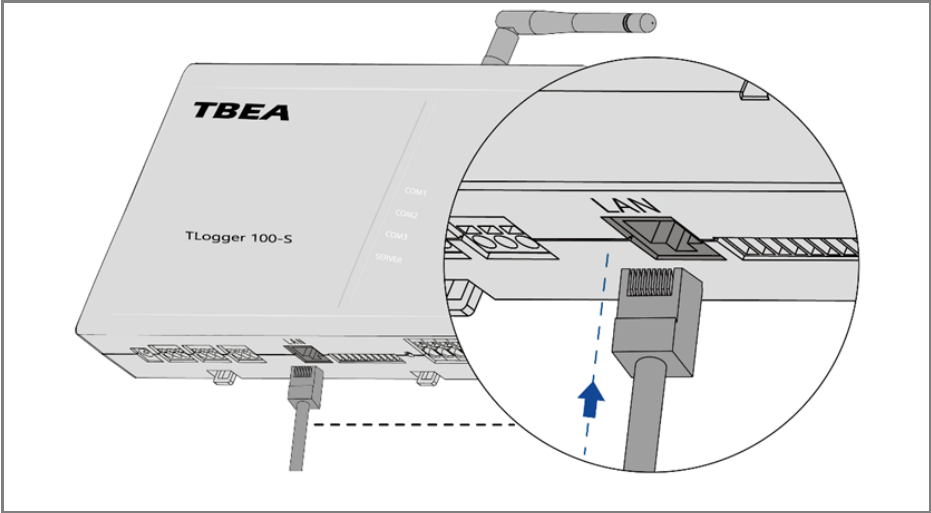
9.3 Connect to multiple inverters or weather station



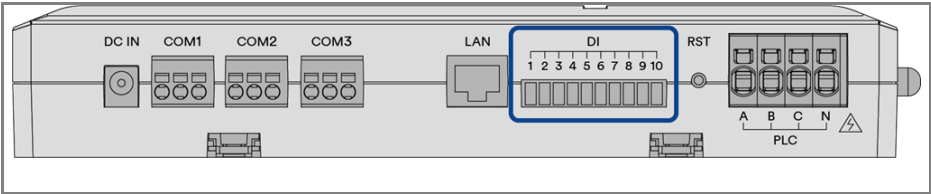
9.4 Connect to a Smart Meter



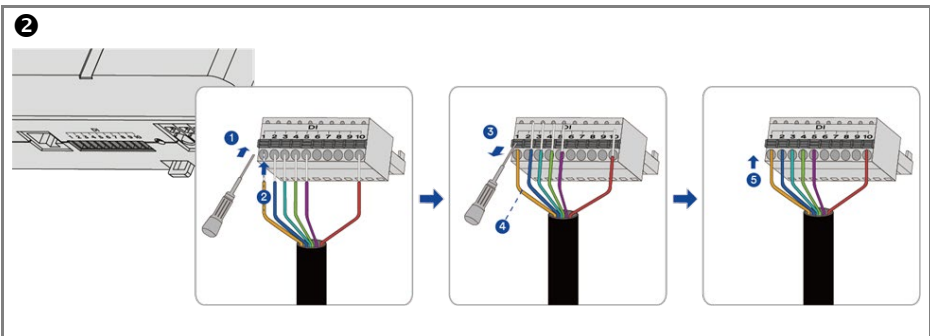
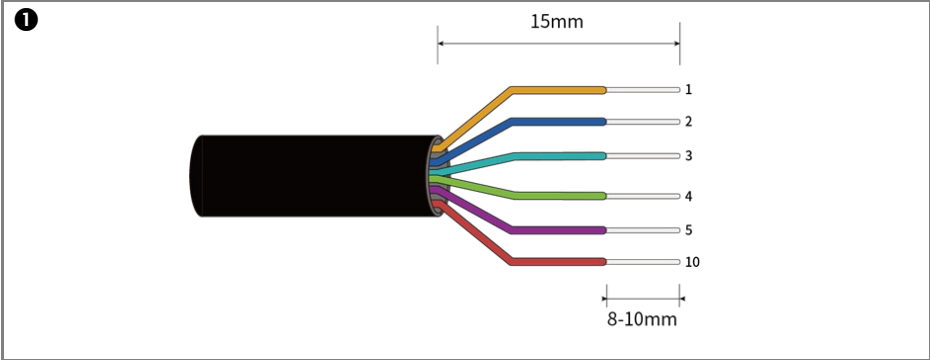
9.5 Connect through Ethernet cable



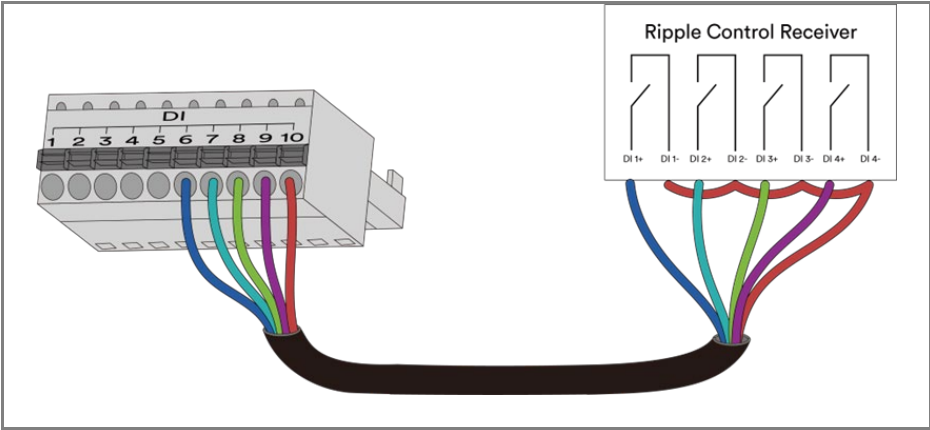
9.6 Digital signal input terminal connection



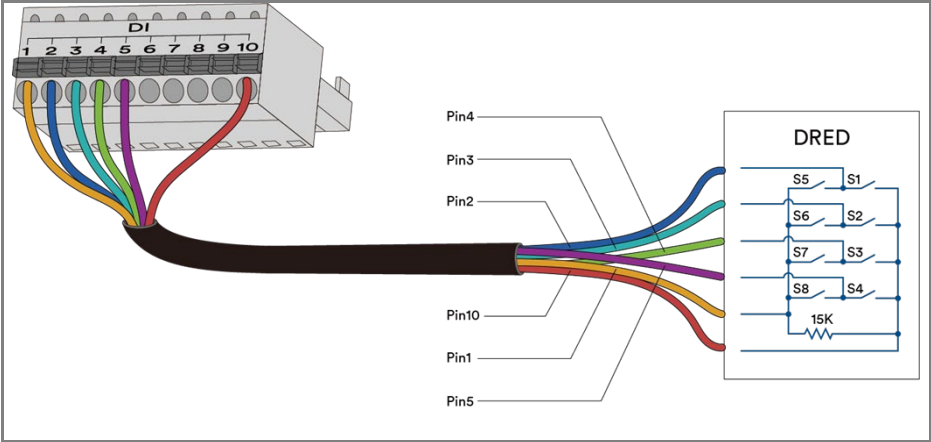
Port	Function	Description
1	VCC	“REF GEN/0” for DRED.
2	DI_1	“DRM1/5” for DRED or used for reactive power control “D1”.
3	DI_2	“DRM2/6” for DRED or used for reactive power control “D2”.
4	DI_3	“DRM3/7” for DRED or used for reactive power control “D3”.
5	DI_4	“DRM4/8” for DRED or used for reactive power control “D4”.
6	DI_5	“K1” for Ripple Control Receiver.
7	DI_6	“K2” for Ripple Control Receiver.
8	DI_7	“K3” for Ripple Control Receiver.
9	DI_8	“K4” for Ripple Control Receiver.
10	GND	“COM LOAD/0” for DRED or Common GND for Ripple Control Receiver.



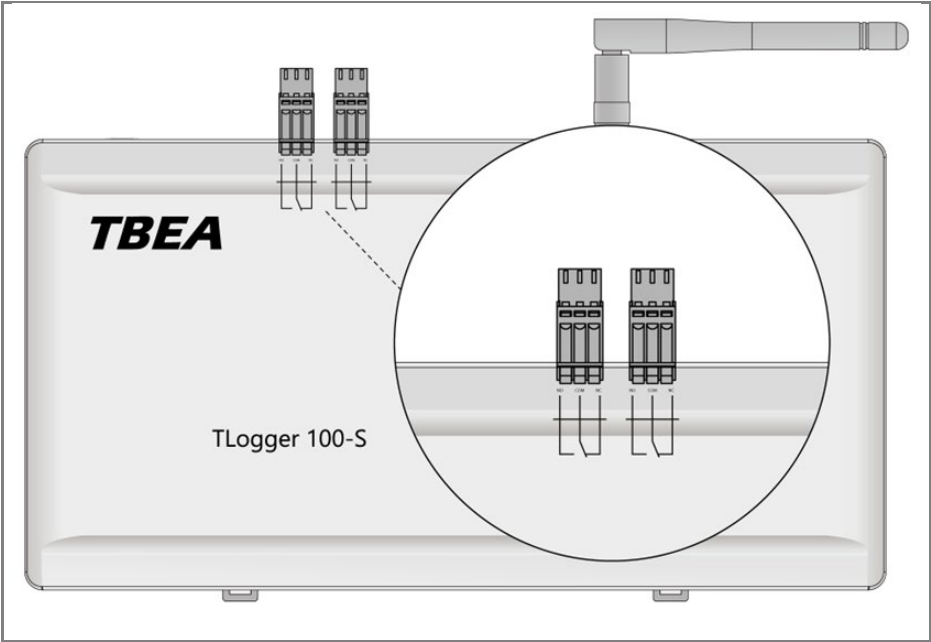
9.7 Connect to Ripple Control Receiver

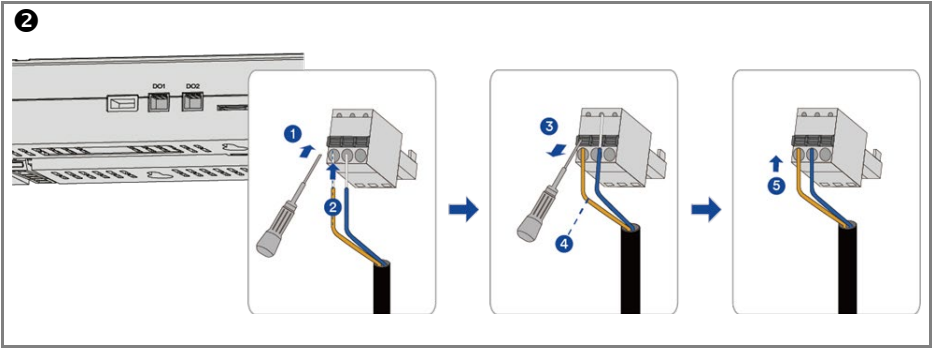
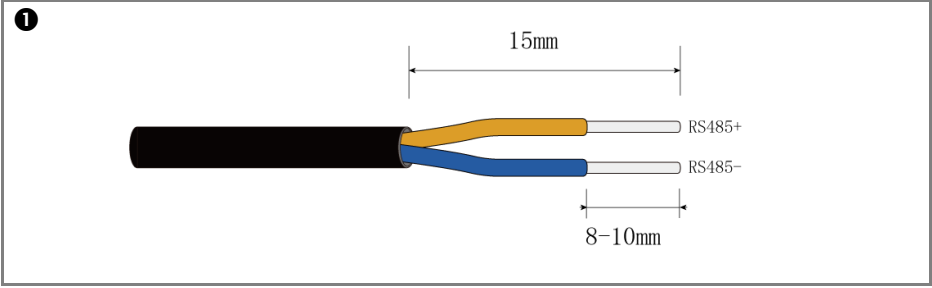


9.8 Connect to Demand Response Enabling Device (DRED)

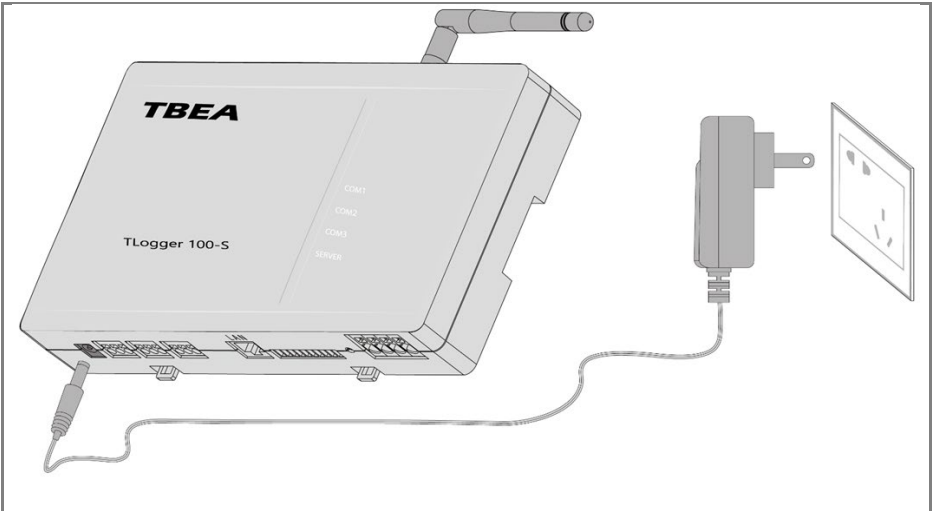


9.9 Dry contact output interface connection





9.10 Power supply connection



10 Contact

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