INSTALLATION INSTRUCTIONS OF VML-NOMO IOT GATEWAY

(4G DTU)

1. PRODUCT INTRODUCTION 1.1. Product Overview

DTU 4G is a high-performance, low-power ZigBee full duplex data communication gateway, supporting ZigBee, Wi-Fi, 3G / 4G wireless communication, Ethernet wired communication. It can meet the networking requirements of ZigBee devices with the characteristics of high communication distance, low power consumption and multiple access points. It is an industrial communication device that can work stably in harsh environment. It is an ideal gateway for smart lighting, smart city, smart community, smart bus stop and other fields.

1.2 Function Features

* 5V ~ 12V DC input

* Follow the ZigBee wireless transmission protocol, support the separation of sending and receiving full duplex ZigBee communication

* Support Wi-Fi, 3G / 4G, Ethernet and other network access modes

* A single gateway can access up to 300 nodes

* Maximum transmission distance 2km

1.3 Communication Parameters

Communication Parameters	Description
Transmission Distance	2KM
Data Protocol	TCP
Access Mode	LAN,3G/4G
ZigBee Antenna	
4G Antenna	
Wi-Fi Antenna	

Ethernet Port	Optional

1.4 Hardware Parameters

Hardware Parameters	Description
Supply Voltage	5V～12V
Power Consumption	< 3W
Network / Power Interface	RJ45+DC

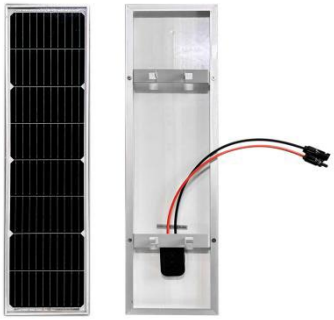
2. INSTALLATION

4G DTU must be installed correctly in order to achieve the design function. Generally, the installation of equipment needs to be carried out under the guidance of qualified engineers recognized by our company. The gateway supports 3G / 4G and ETH (wired) networking. Users can choose the networking mode according to the actual situation. If they can access 4G network and ETH at the same time, Ethernet is preferred.
Matters need attention: No electrified operation

2.1 Packing List

Name	Quantity	Description
4G DTU	1	
Screws	4	
Solar Panel	1	
Antennas	2	
Clamps	4	
Mounting Plates	2	

2.2 Schematic Diagram of Parts

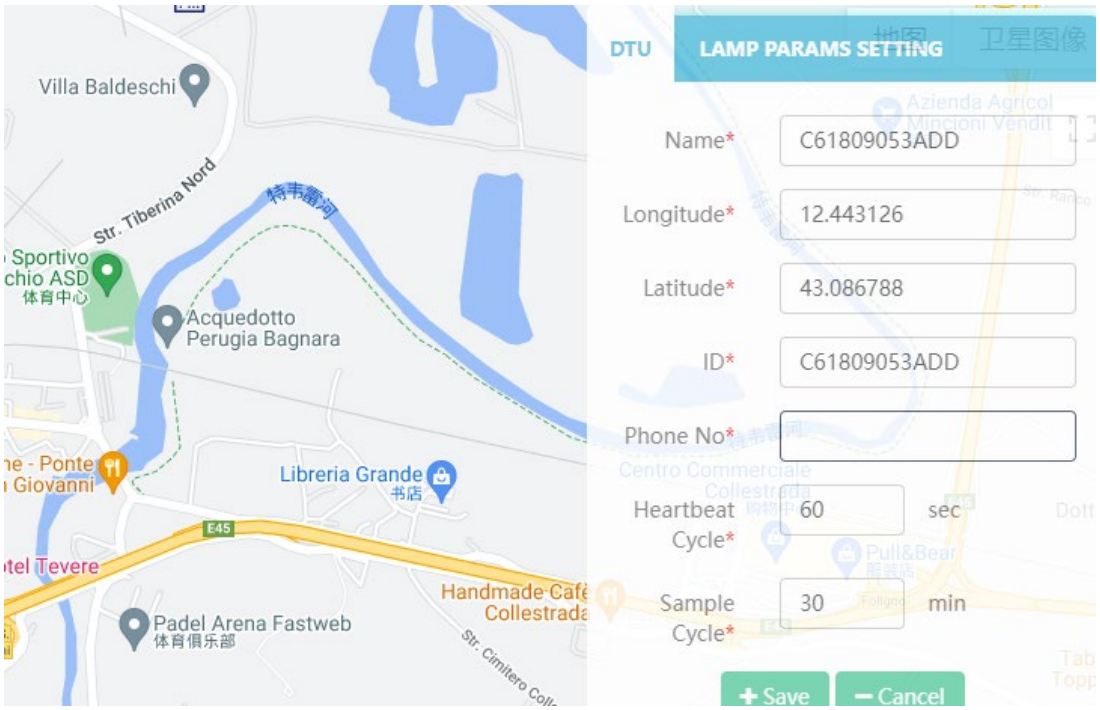


2.2.1 Post-installation Diagram

2.3 DTU Account Setup:

1.take out the DTU and check the DTU number, which can be found on the external label (and also inside).

2.Log in to iot-sun.com, enter "project management" - "equipment center", Set up a corresponding DTU concentrator, select the concentrator in the right pop-up window, fill in the ID of the concentrator, and sim card number. the location info can be changed later.



2.4 SIM Card Installation

2.4.1 SIM is a built-in component. To install SIM, you need to open 4G DTU for operation. Refer to the following steps:

2.4.1.1: Open the DTU, remove the network cable, take out three screws, and insert the SIM card into the slot.
2.4.1.2 Connect the battery, the light will flash in 15 seconds.

2.4.2. Log in to the DTU platform at iot-sun.com, select the corresponding DTU number, right-click to update the data. Once the it turns green and displays a successful transmission, it is ready for use.

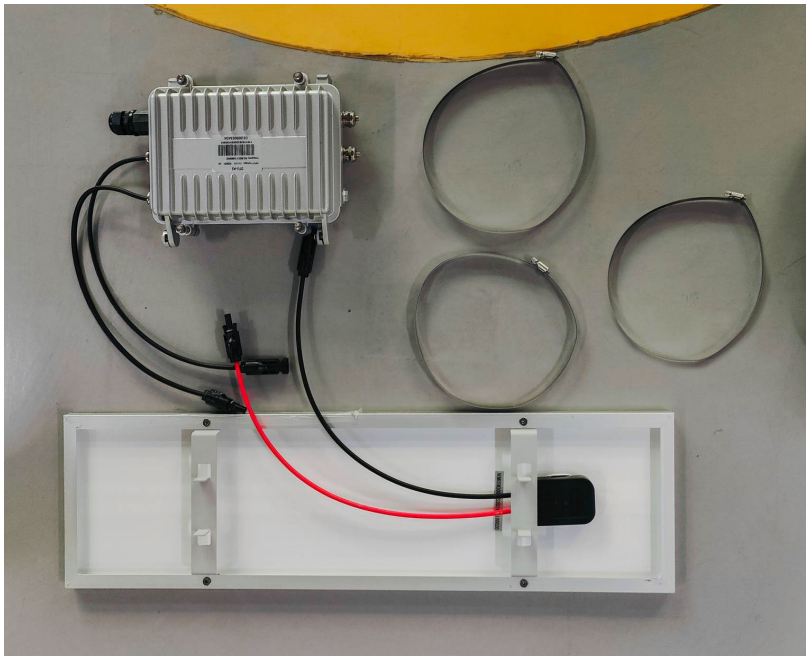
2.4.3. Tighten three screws, plug in the network cable interface, and screw on the external screws.

2.5 Antenna Installation

The 4G DTU has two antennas connected to the right side of the gateway facade.

2.6 Ethernet Connection (Optional)

If you need a network cable connection, you can connect it at the network cable interface



2.7 Power supply installation

4G DTU is usually used in complex external environment. In order to adapt to the complex application environment and improve the stability of the system, the gateway adopts advanced power technology. Users can use standard configuration power supply to power the gateway, or directly use DC 5 ~ 12V power supply to power the gateway.

2.7.1, Fix the solar panel. First, fix the fixing plate to the solar panel with screws.

2.7.2, Use the clamp to fix the solar panel to the middle or high area of the light pole.

2.7.3, Use the clamp to fix the DTU to the light pole, not too far away from the solar panel

2.7.4, Connect the MC4 connector between the solar panel and the DTU.

3. OPERATION

After the above installation, the gateway can operate normally when it is powered on.

4. Set up the RTU

The RTU number is affixed to the outside of the packaging box and the outside of the machine. On the platform map, add the corresponding RTU number under the corresponding DTU according to the location of the lamp, and you can get the operating data of each lamp on the platform.