How to add slave SmartLogger to master SmartLogger

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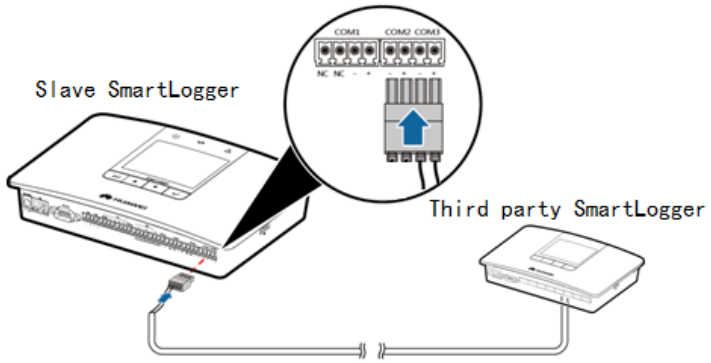
This topic describes how to connect a slave Smartlogger to a master Smartlogger.
This function is just used for the power control, like the AGC/AVC, for example, a Smartlogger got the command from the Electrical Power Center, and then transfer them another Smartlogger, to achieve the remote power control function, but we cannot use this for monitoring, it means that we cannot see the inverter from the slave Smartlogger.
The SmartLogger whose COM port is set to the Modbus-Slave mode is called the slave data collector, and the third-party data collector is called the master data collector. The third-party data collector connects to the COM port on the SmartLogger using the RS485 port, so that the third-party data collector can perform operations, such as querying status, setting parameters, and starting or shutting down devices, on the devices (such as inverters) connected to the slave data collector.
The SmartLogger can connect to a maximum of five NMSs using the Modbus TCP protocol, or a maximum of five NMSs. This enables customers to use third-party NMSs (such as NARI NMS) to implement centralized monitoring, and at the same time use Huawei NetEco to perform remote upgrades, upload logs, set parameters in batches, analyze historical performance data diagrams and tables, analyze historical alarms, and use other functions to manage smart PV plants.

1. Connect using RS485 port to the Modbus Slave Mode

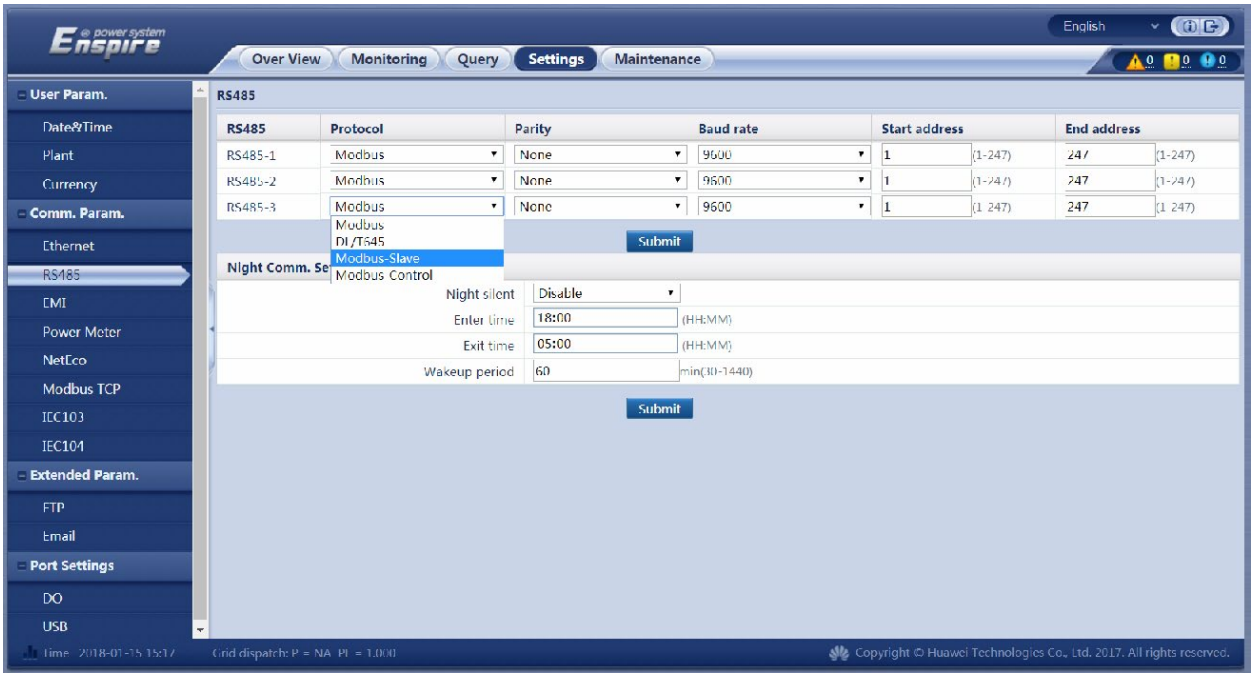
1.1Smartlogger1000

Connect the COM3 port of the slave data collector to the RS485 port of the third-party data collector. The RS485 port of the third-party data collector must work in the master mode. If the slave data collector must be connected to an NMS, connect one end of a network cable to the network port of the slave data collector and the other end to a network switch or router.
Connecting the COM3 port of the slave data collector to the RS485 port of the third-party data collector.



Set the RS485-3 port to the slave mode on the web client.

Log in as an advanced user to the web client of SmartLogger, click the **Settings** tab, and choose **Comm. Param.** > **RS485**. Set **Mode** to **Slave** for the RS485-3 port and click **Submit**.

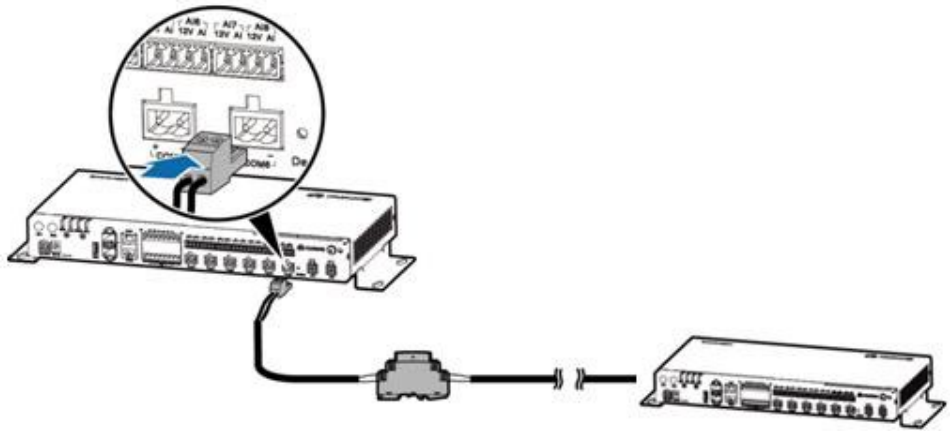


After the slave mode takes effect, connect the devices including inverters to COM1 and COM2.

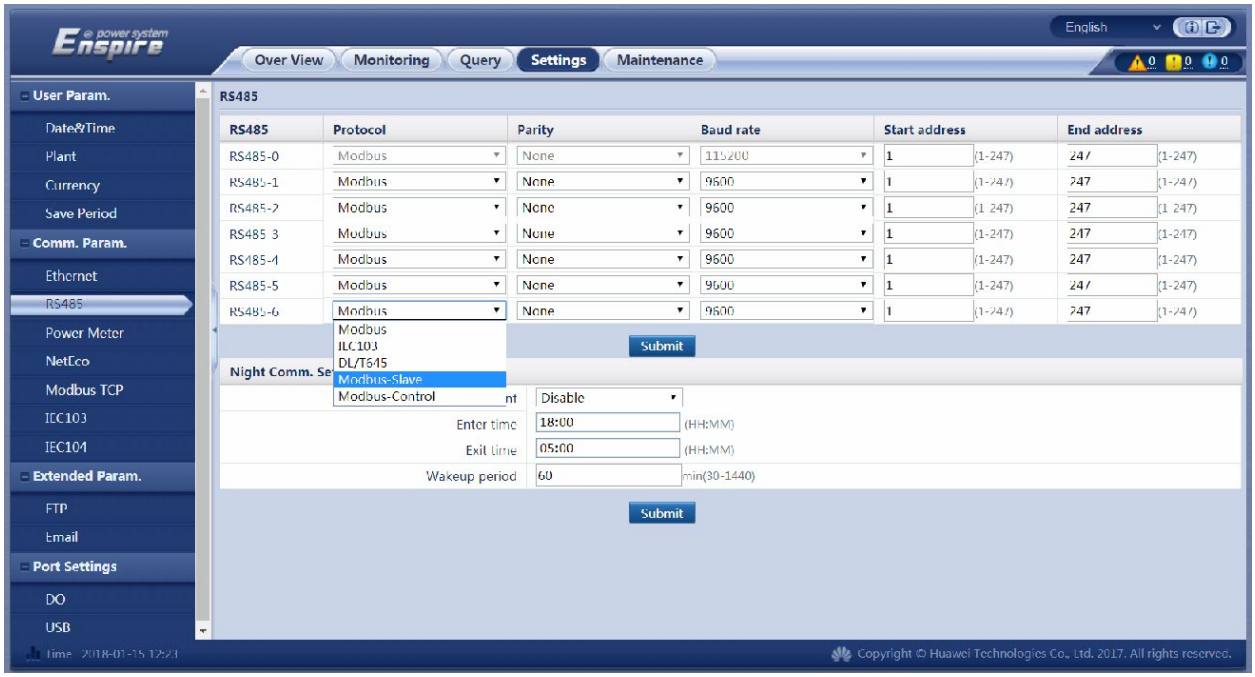
1.2 Smartlogger2000

Connect a port (COM6 for example) on the slave data collector to the RS485 port

on the third-party data collector. The RS485 port on the third-party data collector must work in the master mode. If the slave data collector must be connected to an NMS, connect one end of a network cable to the network port on the slave data collector and the other end to a network switch or router.
Cabling for slave mode configuration.



Set the RS485-3 port to the slave mode on the web client.
Log in as to the embedded WebUI as an advanced user, click the **Settings** tab, and choose **Comm. Param.** > **RS485**. Set **Protocol** to **Modbus-Slave** for RS485-6, and click **Submit** to enable the slave mode.



After the slave mode takes effect, connect the devices including inverters to other COM ports.

2. Connect using Modbus TCP

2.1 Prepare the environment

Make sure that Master-SmartLogger and Slave-SmartLogger can visit each other through the internet with cable.
For example:

a) Two SmartLoggers have the same network range:

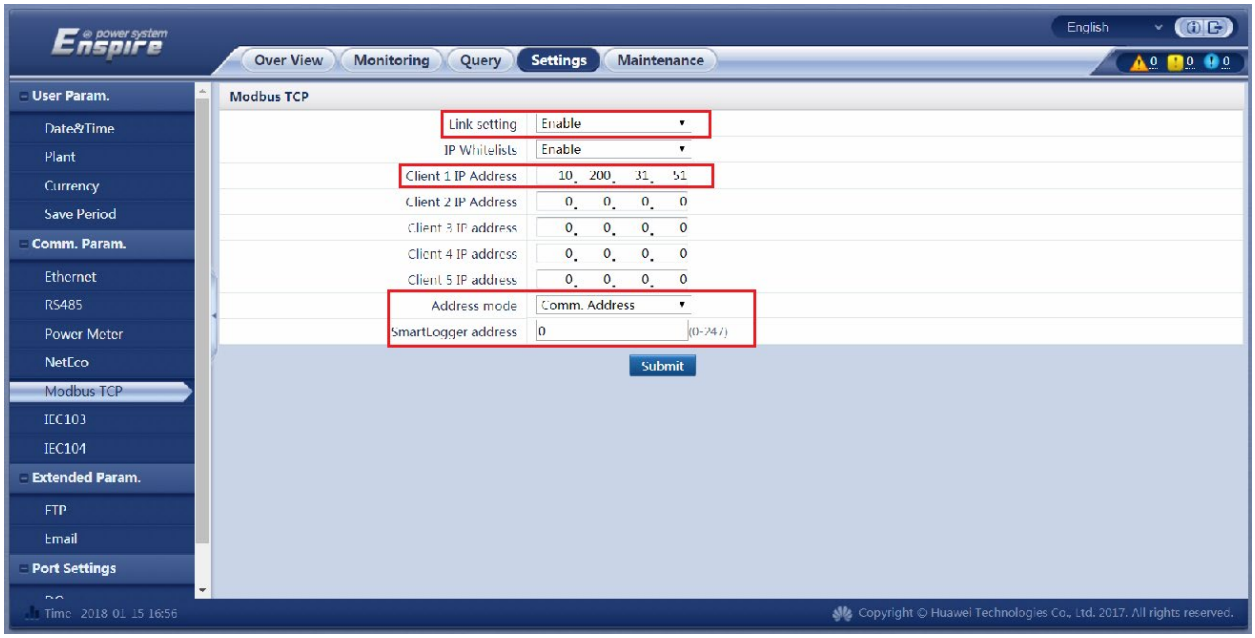
Master-SmartLogger's IP Address: 10.200.31.51
Slave-SmartLogger's IP Address: 10.200.31.69
That means these SmartLoggers in the same network range;

b) Maybe Master-SmartLogger and Slave-SmartLogger have different IP address, maybe they access to different routers:

How to test:
Use your computer to access to anyone router, get an IP address, then use the command "ping", to make sure you can visit this two SmartLoggers at the same time.

2.2 Do the setting in the Slave-SmartLogger

a) Use "Advanced user" to log in the SmartLogger's website;
b) In "Setting" menu→ "Modbus TCP", choose "Enable" and then input the Master-SmartLogger's IP address, like you can see below:



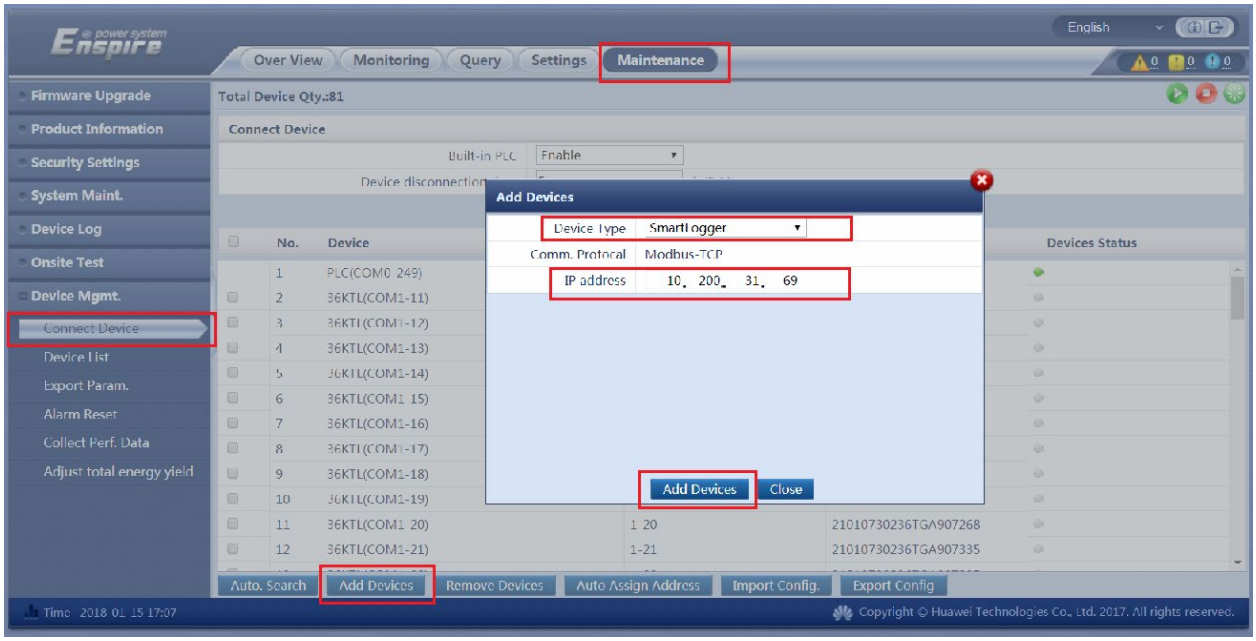
Notice:

If the Master-SmartLogger will add several Slave-SmartLoggers, different Slave-SmartLogger need the different “SmartLogger address”, you can input the address you want in the “Smartlogger address”.

2.3 Manually add the Slave-SmartLogger on the Master-SmartLogger

You can see below how to add the Smartlogger:

Login as advanced user->Maintenance menu->Connect device->Add device->choose at device type Smartlogger, com. Protocol Modbus TCP and set the IP of the slave Smartlogger and Add device.


Over View
Monitoring
Query
Settings
Maintenance
Firmware Upgrade
Product Information
Security Settings
System Maint.
Device Log
Onsite Test
Device Mgmt.
Connect Device
Device List
Export Param.
Alarm Reset
Collect Perf. Data
Adjust total energy yield
Total Device Qty.:81
Connect Device
Add Devices
Device Type
SmartLogger
Comm. Protocal
Modbus-TCP
IP address
10. 200. 31. 69
Add Devices
Close
Auto. Search
Add Devices
Remove Devices
Auto Assign Address
Import Config.
Export Config