

## Growatt Inverter Error 111 cause & solution

Note: This is only applicable for Growatt single phase inverters

### Cause

The voltage between the Neutral Line and the Earth Line (PE) is higher than 50 volt.

Or there is no Neutral Line available (only Live Line L1, L2 for some special grid category).

If this happens, the inverter would report Error 111 immediately after power up.

### Solution

Disable the Neutral and Earth Line detecting function.

Please following the below 2 options:

1. Disable by set the register 192 to value 0 using Modbus test software.

Set to value 1: Activate

Set to value 0: Disable

- (1) Connect your laptop and inverter RS232 port via a RS232-to-USB converter, and install the proper drivers for the cable(the driver software would come with the cable). Open Modbus test software, Complete the required setting as per the below screenshot,

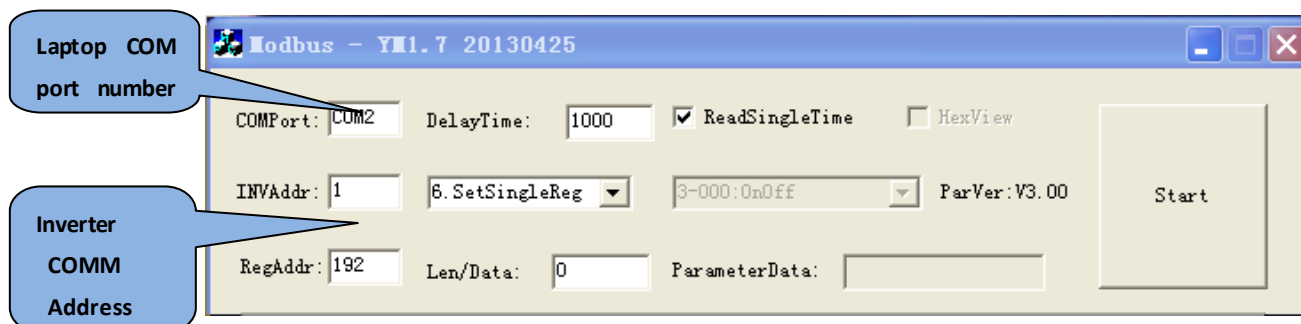
COMPort: check from your laptop's Device Manager;

INVAddr: check from the Inverter's LCD display, which is showing: **COM Address: XXX**

RegAddr: inverter register's address, fill in **192**

Len/Data: fill in **0**

- (2) and then click "Start".



- (3) Modbus software would be showing "**!--Response OK--!**", if the setting is successful.

- (4) Confirm the Error 111 had been cleared on the inverter.

2. Set inverter Register number 192 to value 0 via the ShineServer monitoring interface.

(1) Search and find your inverter on the ShineServer monitoring platform

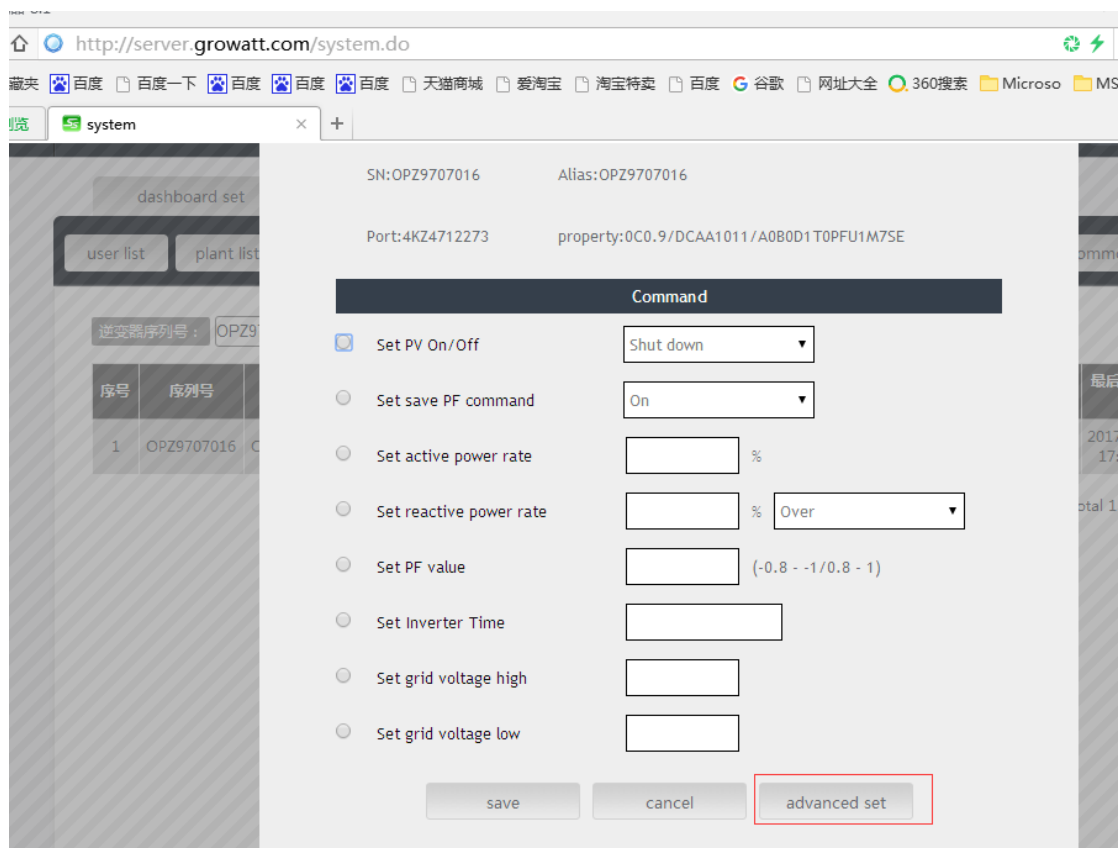
(for example : OPZ9707016 -- inverter SN)

The first screenshot shows the Growatt ShineServer monitoring interface. The 'Setting' menu is highlighted in the top navigation bar. Under 'system set', the 'inverter list' tab is selected. The search bar contains the inverter serial number 'OPZ9707016'. The search results table is empty, displaying '无逆变器' (No inverter).

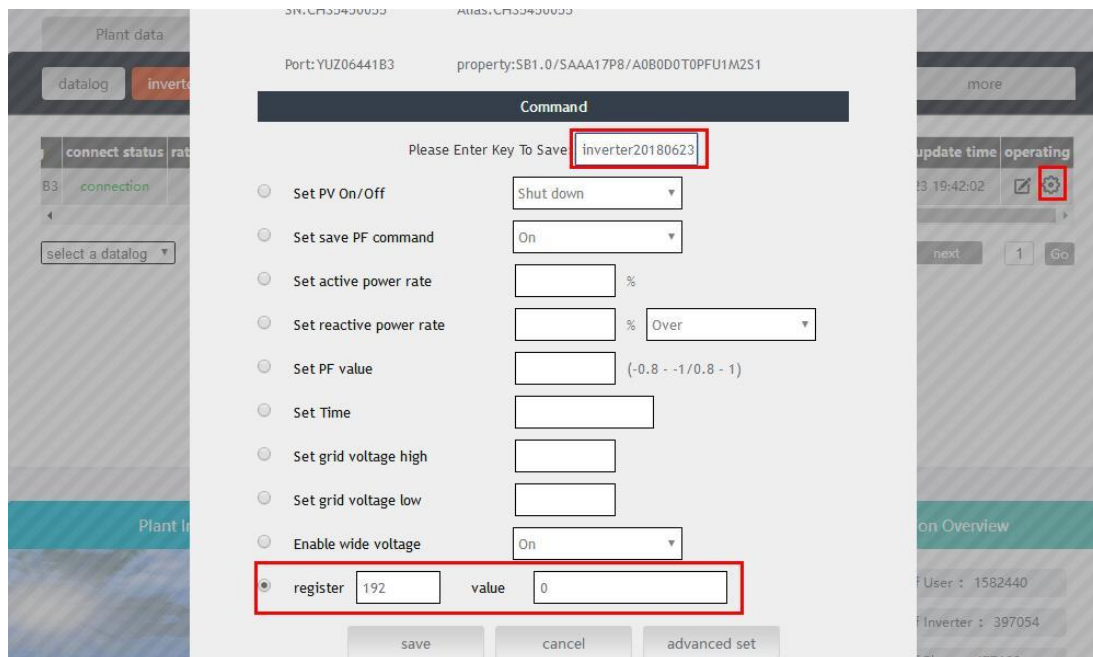
The second screenshot shows the same interface after a search. The search results table now contains one entry for inverter OPZ9707016. The 'operation' column for this entry has a red box around the 'set' button (gear icon).

序号	序列号	别名	数据采集器	连接状态	额定功率(W)	当前功率(W)	今日发电(kWh)	当月发电(kWh)	累计发电(kWh)	最后更新时间	操作
1	OPZ9707016	OPZ9707016	4KZ4712273	等待	7000	0.0	0.0	172	172.0	2017-06-07 17:21:46	设置

(2) Click the set button , a dialogue window would pop out.



(3) Click the 'advanced set' button, it will appear the register set choice and then set the right register and the value.



- (3) Select as the above illustration, fill in the register number with 192, and fill in the value as 0 (as illustrated on the above), then click “save”. (The key for it is [inverterYYYYMMDD](#))  
Repeat to set it for several times, in case the remote monitoring missing data.
- (4) Confirm the Error 111 had been cleared on the inverter.

Customer Service Department