



SmartGen
ideas for power

SGB100

BLUETOOTH COMMUNICATION MODULE

USER MANUAL



SMARTGEN (ZHENGZHOU) TECHNOLOGY CO.,LTD.



Chinese trademark

SmartGen English trademark

SmartGen —make your generator *smart*

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Software Version

Date	Version	Content
2017-01-06	1.0	Original release.



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1 OVERVIEW

SGB100 Bluetooth Communication Module is wireless communication module designed for SmartGen genset controllers, which can monitor and adjust configuration parameters of controllers via iGMPA6 mobile phone software.

2 PERFORMANCE AND CHARACTERISTICS

- 1) It is reliable with Bluetooth 4.1 and BLE low power consumption communication mode.
- 2) Small and light, easy to take.
- 3) Configuration work is finished on the mobile client instead of computer used before. More convenient and reduced requirement for the working platform.

3 TECHNICAL PARAMETERS

Item	Content
Power Supply Mode	USB (<50mA)
Port Type	B-type USB port (male port)
Bluetooth Module	Bluetooth 4.1
Bluetooth Comm. Mode	BLE low power consumption communication mode.
Communication Distance	10m (barrier free)
Overall Dimensions	51.3mm x 36.1mm x 17.6mm (wire length 30cm)
Weight	40g
Working Condition	Temperature: (-25~+70)°C Relative Humidity: (20~93)%
Storage Condition	Temperature: (-25~+70)°C

4 SOFTWARE

4.1 SOFTWARE DOWNLOAD

Please download iGMPA6 mobile phone client-side from SmartGen official websites as below,

<http://www.smartgen.com.cn/datadownload.php>


<http://www.smartgen.cn/datadownload.php>

4.2 SOFTWARE INSTALLATION REQUIREMENTS

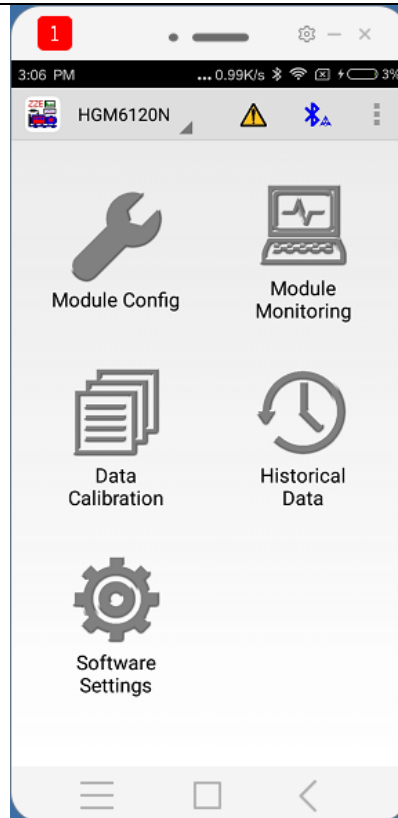
Mobile phone and mobile device need to support Bluetooth 4.0 function and above android 4.3 version (4.7 inch or larger screen of mobile phone is recommended)

4.3 SOFTWARE FUNCTION DESCRIPTION

Software Name: iGMPA6

Software Icon: 





Software Interface:



Software Function Module:

- A. Module Config: Configure module's parameters;
- B. Module Monitoring: Check engine information, input/output ports status, maintenance and electric quantity information.
- C. Data Calibration: Calibrate controller's data and time, total run time, total start times and active electric energy.
- D. Historical Data: Read and clear controller's event log information.
- E. Software Settings: Check and management controller's saved configuration files, event log files and software version information.

Menu:

- A. "Device Connection"  : It is shown on each page of software, which is used for searching, connecting or breaking Bluetooth device; when connected successfully, the icon turns to .
- B. "Scan": It is shown on the page of Bluetooth device connection, which is used for scanning surrounding Bluetooth device.
- C. "Alarming Status" : For each page of software, it can be functional. When alarms or warnings occurred, it is appeared on the page, and users can check detail alarm information in this menu, otherwise, it is not displayed.



5 OPERATION

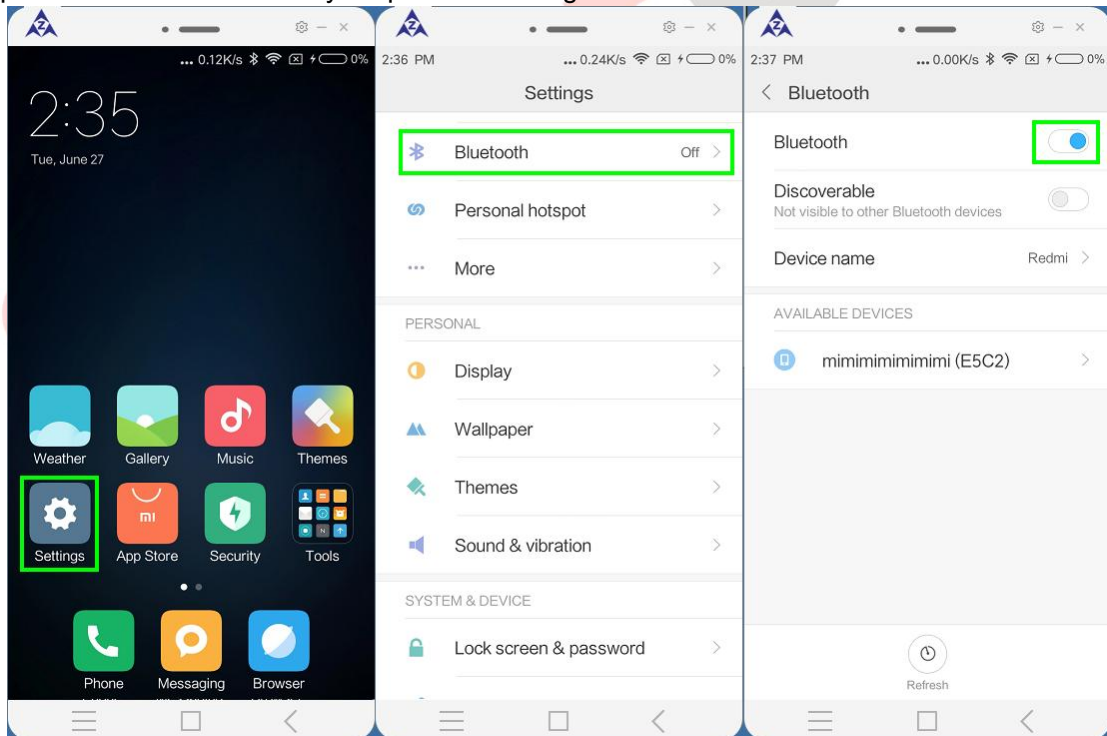
5.1 BLUETOOTH CONNECT WITH CONTROLLER

SGB100 Bluetooth communication module connects with controllers via USB port.



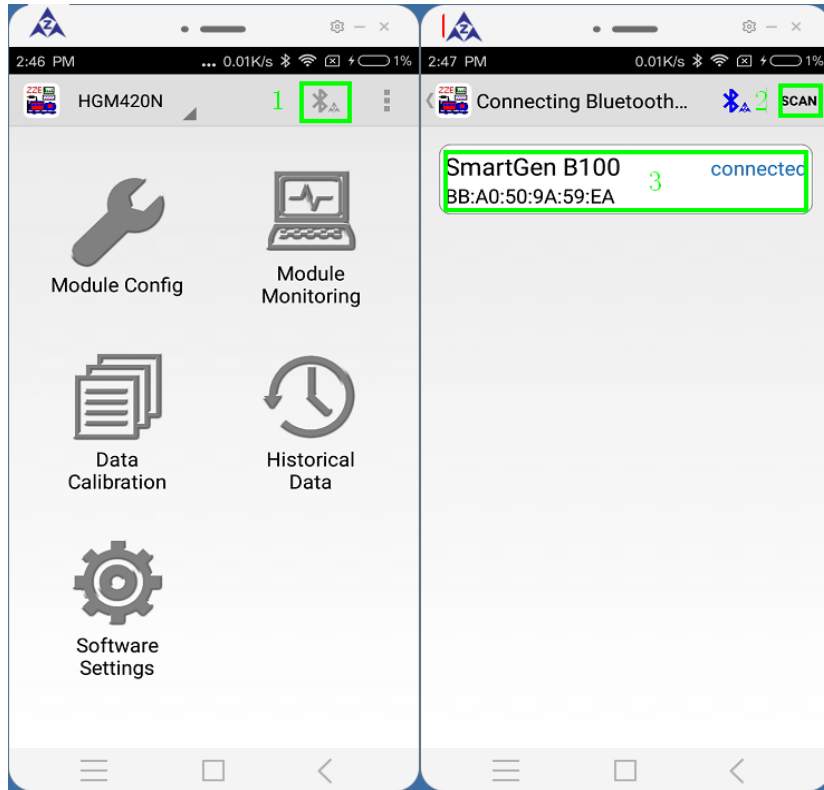
5.2 OPEN BLUETOOTH FUNCTION ON YOUR PHONE

Open Bluetooth function on your phone: "Settings" -->"Bluetooth"




5.3 iGMPA6 CONNECT TO BLUETOOTH COMMUNICATION MODULE

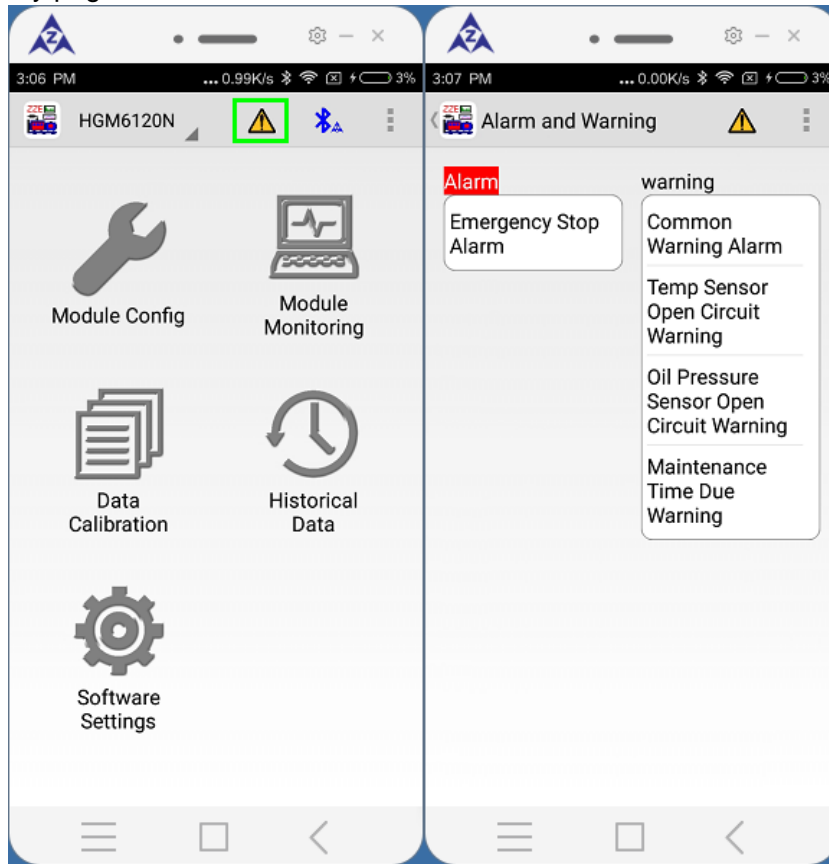
Click “Connection” in any page of iGMPA6 software to enter into “Connecting Bluetooth” interface, and then scan the surrounding Bluetooth. Click the name of device to connect and re-click to release connection.





5.4 CHECK ALARMING & WARNING INFORMATION

Click  in any page of iGMPA6 software to check the detail alarm and warning information.





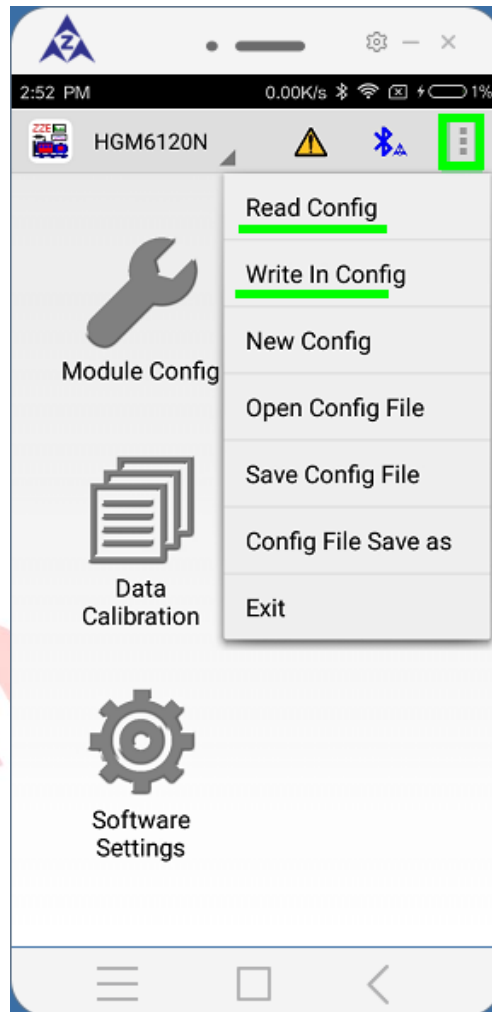
5.5 MODIFY MODULE CONFIGURATION

Configuration parameters of controller can be read into iGMP6 software through “Read Config” in menu page, and the modified parameters can be written into controller through “Write in Config”.

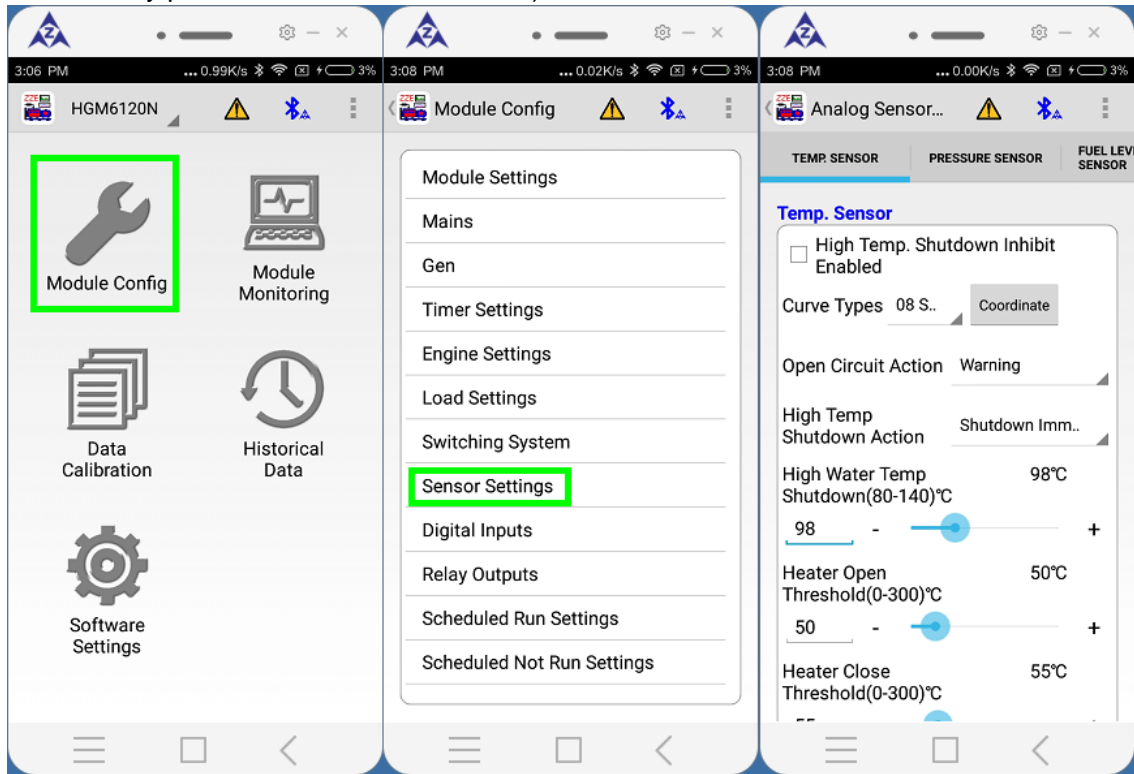
“New Config” will initiate program parameters to the default value.

“Open Config Fail” will load the configuration files in the phone’s catalog of “My Device/SmartGen/iGMPA6/cfg” to the program.

“Save Config Fail” and “Config File Save as” can save the final configuration of the software to the file.



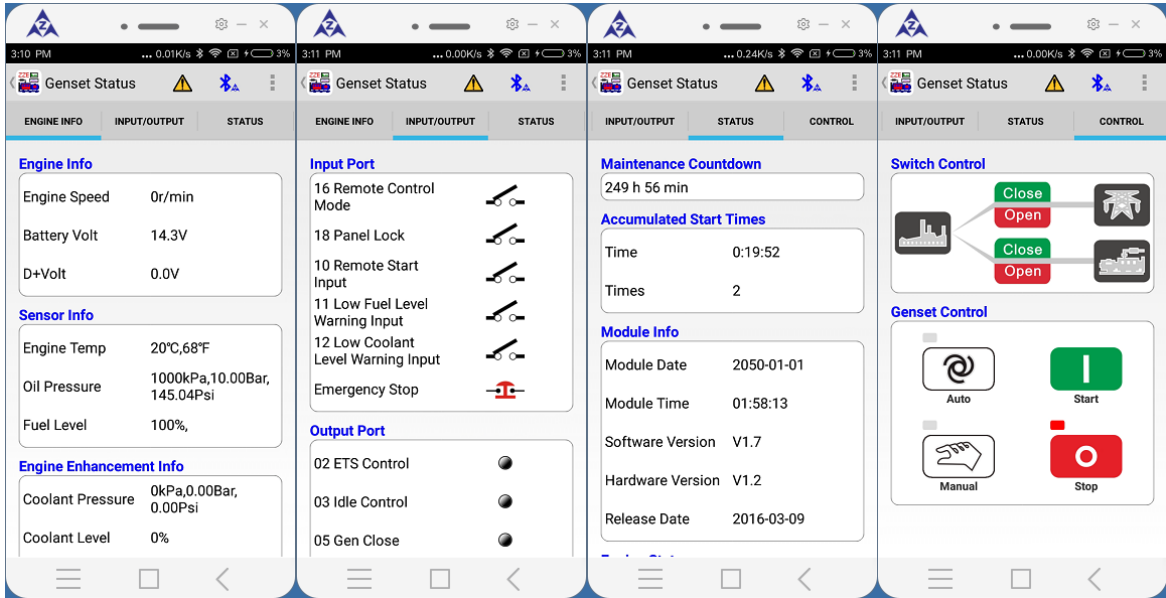
Module configuration parameters can be modified through “Module Config”. (“Read Config” before modify parameters is recommended.)



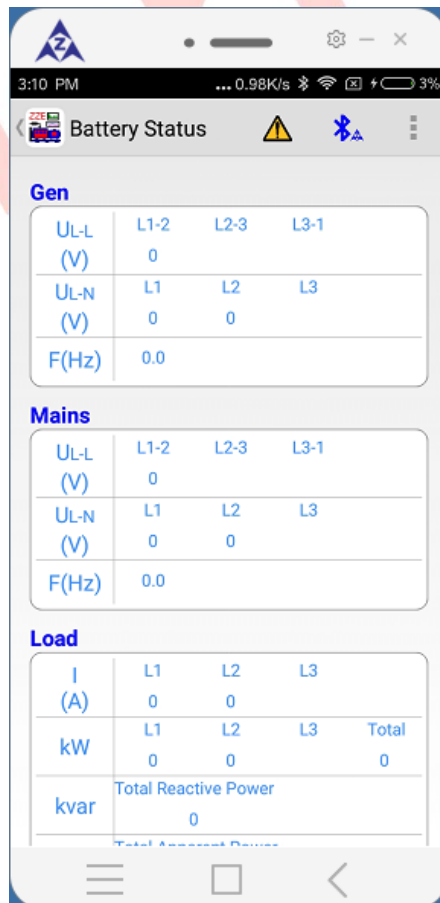
5.6 MODULE MONITORING

Through module monitoring function, users can check electric quantity information, genset working status (including genset information, input/output port information and maintenance status), and also can control genset and transfer switch.

Genset Status(include control operation) is as bellow,

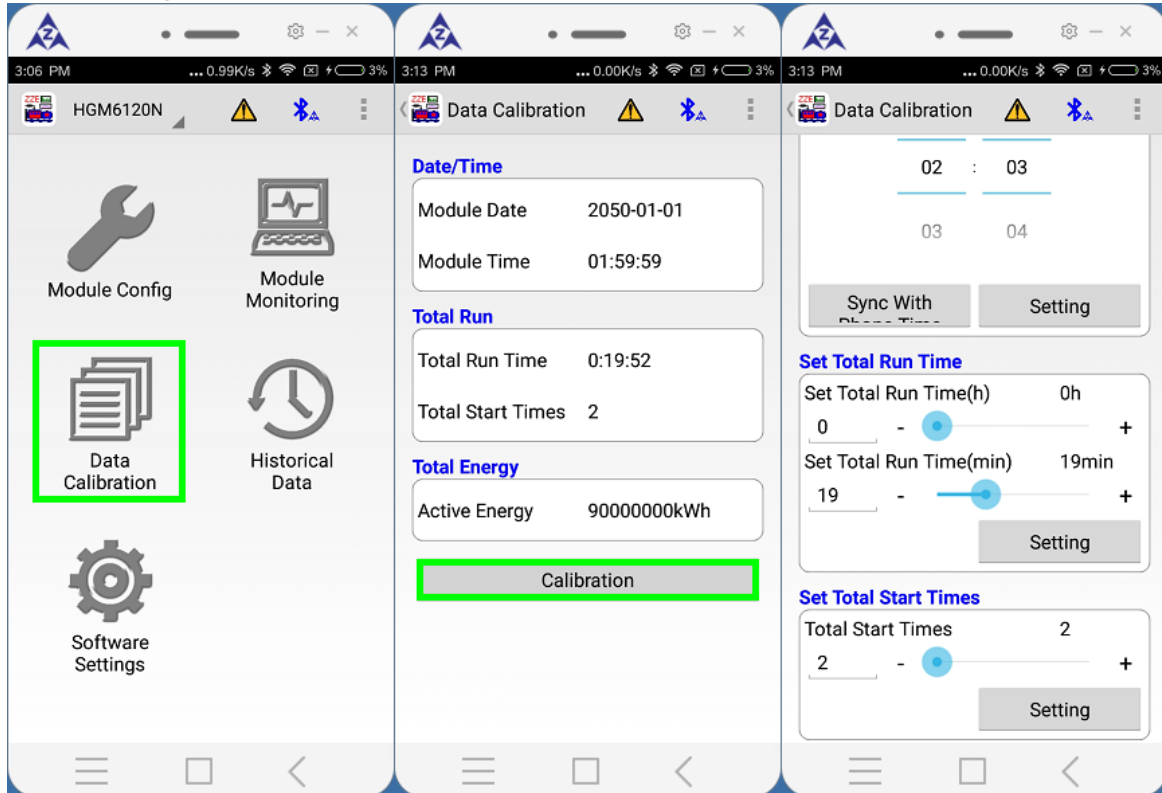


Electric Quantity Information



5.7 DATA CALIBRATION

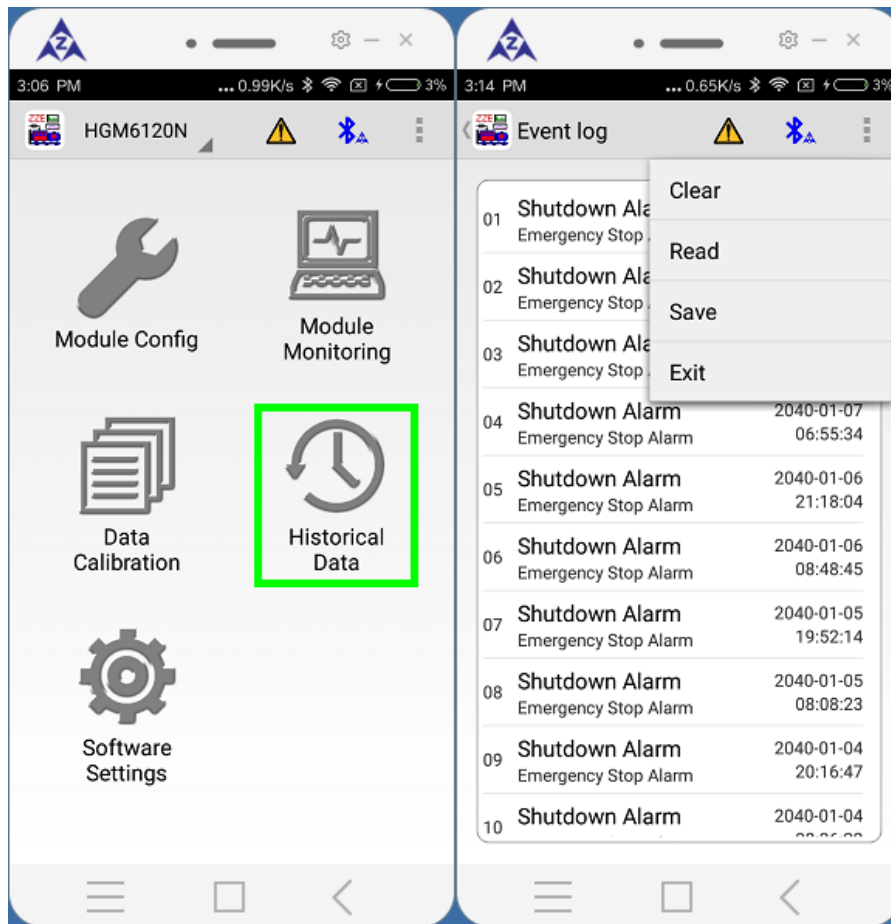
This function can calibrate controller's data and time, total run time, total start times and active electric energy.





5.8 HISTORICAL DATA

This function can read and clear controller's historical data, and save the historical data to catalog of the phone *my device/SmartGen/iGMPA6/history* as the text file.

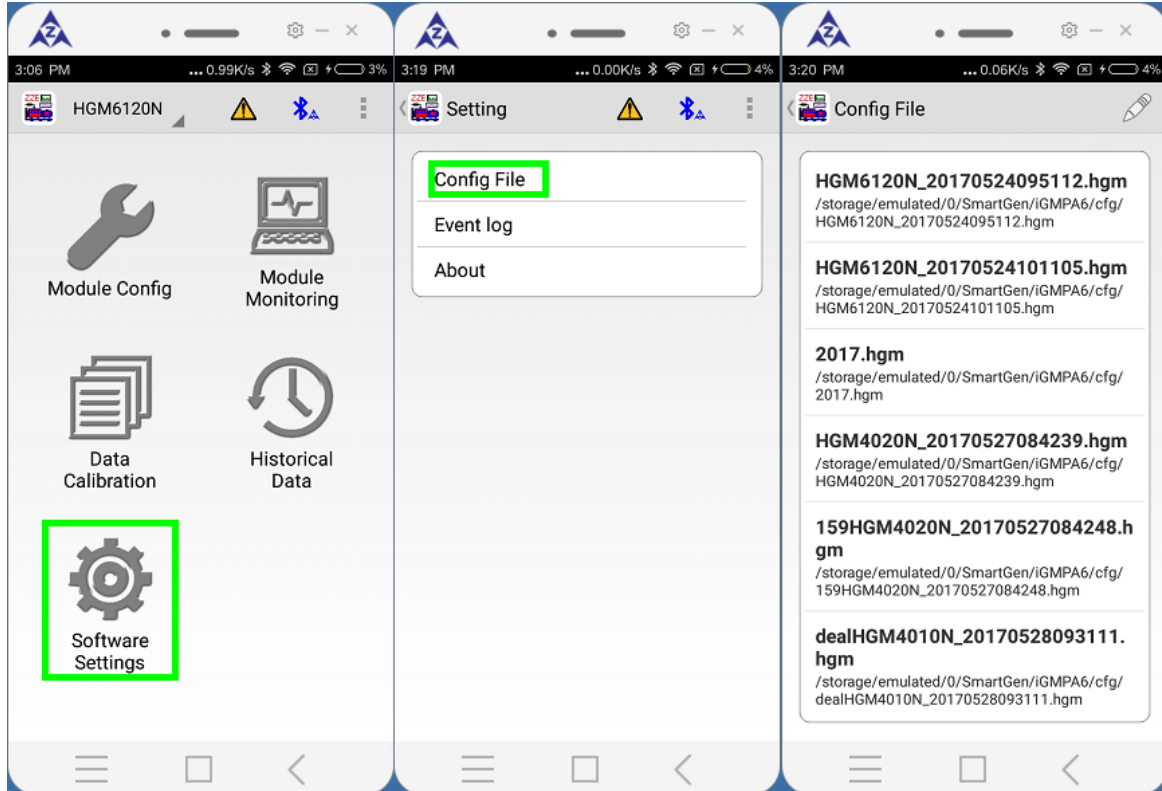


5.9 MANAGE CONFIGURATION FILES

Configuration files in the phone's catalog of *my device/SmartGen/iGMPA6/history* can be managed through “Software Set” ->”Configuration Files” function.

Click each configuration file, and then it can “open in text file form” and “share the file”.

“✎” menu key in the top right corner can batch delete configuration files.




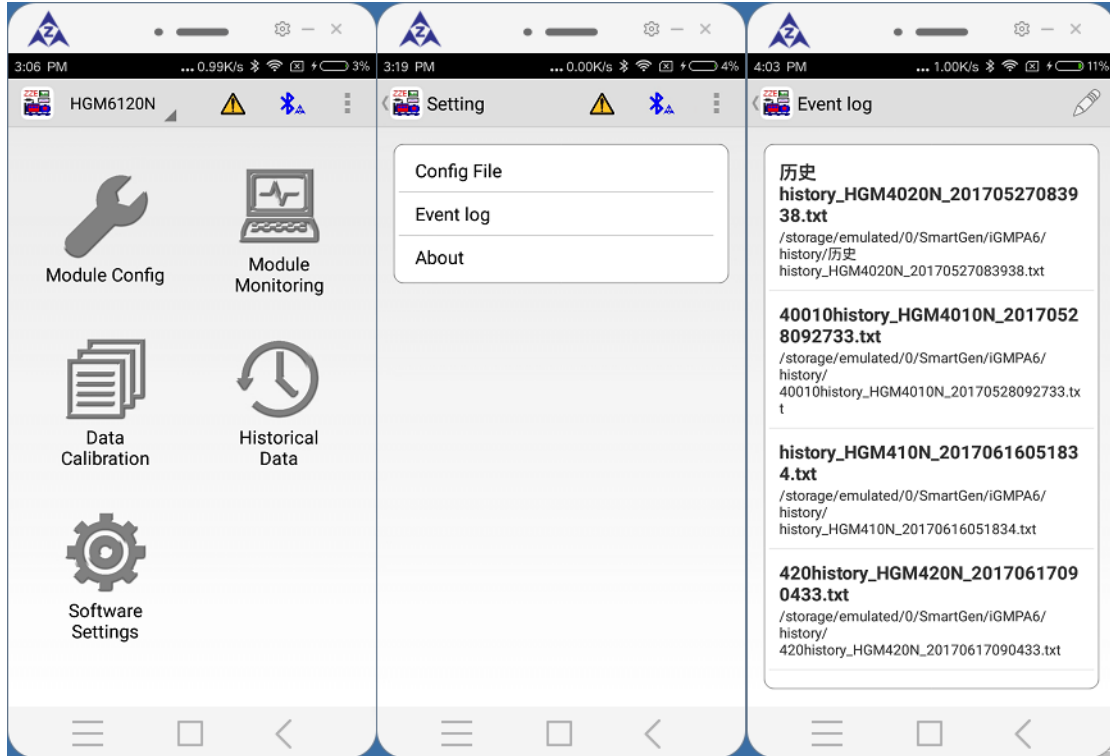


5.10 MANAGE HISTORIC RECORD

Historic record files in the phone's catalog of *my device/SmartGen/iGMPA6/history* can be managed through "Software Set" ->"Historic Record" function.

Click each historic record file, and then it can "open in text file form" and "share the file".

"" menu key in the top right corner can batch delete historic record files.





6 ATTENTION

6.1 CONNECTION DELAY

After iGMP6 connecting with Bluetooth device, it will establish a normal communication connection with the controller after 5s-7s. Otherwise, mobile phone can't communicate with the controller.

6.2 PASSWORD

If users want to change controller's password, please select password option and enter the new password (default password appeared in the input box is not the real password of the controller).

When write in the configuration, if there is a request to enter password, please enter the controller's password.

