

SGB100

BLUETOOTH COMMUNICATION MODULE

USER MANUAL



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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:



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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" A: 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 canning surrounding Bluetooth device.
- C. "Alarming Status" A: 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"

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5.3 IGMPA6 CONNECT TO BLUTOOTH 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.

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Data Calibration	Historical Data			
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SmartGen ideas for powe SGB100 Bluetooth Communication Module User Manual 5.4 CHECK ALARMING & WARNING INFORMATION Click In any page of iGMPA6 software to check the detail alarm and warning information. Ż ∞ – × Â 愈 — × ..0.00K/s 🖇 奈 🗵 升 🗔 3% 3:06 PM .0.99K/s 🖇 奈 🗵 ۶ 🗔 3% 3:07 PM 🚟 Alarm and Warning HGM6120N ⚠ *▲ Ē ⚠ Alarm warning Common Emergency Stop Warning Alarm Alarm Temp Sensor Module Open Circuit Module Config Monitoring Warning Oil Pressure Sensor Open Circuit Warning Maintenance Time Due Data Historical Warning Calibration Data Software Settings

5.5 MODIFY MODULE CONFIGURATION

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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.

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	Read Config	
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Data Calibration	Exit	
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Software Settings		



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

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-		Digital Inputs	98		
O		Relay Outputs	Heater Open 50°C Threshold(0-300)°C		
Software		Scheduled Run Settings	50		
Settings		Scheduled Not Run Settings	Heater Close 55°C Threshold(0-300)°C		
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5.6 MODULE MONITORING

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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

		0.38	NS 4 7	
🟭 Batte	ery Statu	is 4		B A
Gen				
UL-L	L1-2	L2-3	L3-1	
(V)	0			
UL-N	L1	L2	L3	
(V)	0	0		
F(Hz)	0.0			
Mains				
UL-L	L1-2	L2-3	L3-1	
(V)	0			
UL-N	L1	L2	L3	
(V)	0	0		
F(Hz)	0.0			
Load				
	L1	L2	L3	
(A)	0	0		
kw.	L1	L2	L3	Tota
R.VV	0	0		0
kvar	Total Read	ctive Powe	r	



5.7 DATA CALIBRATION

Smart Gen ideas for power

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







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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.

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	Module Settings Stop Mode AC System 2-Phase 3-Wire(
	Please enter controller	
	Ok 1 Boot Interface Enabled Boot Interface 10s Delay(0-3600)s	