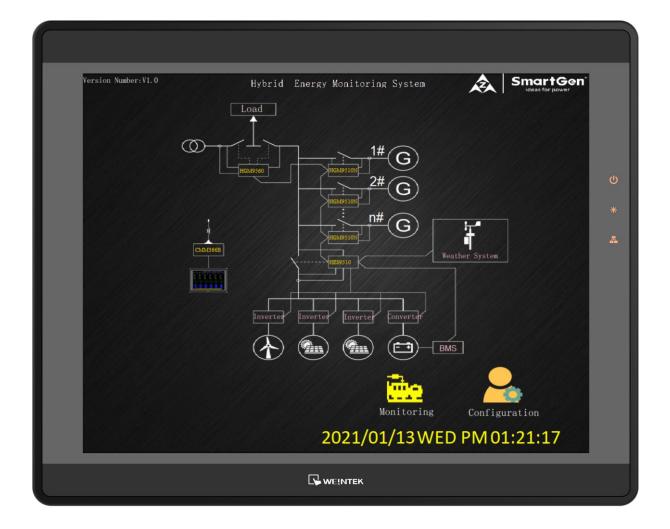


## HES9510-RM HYBRID ENERGY MONITORING SYSTEM

# **USER MANUAL**



### SMARTGEN (ZHENGZHOU) TECHNOLOGY CO., LTD.





# SmartGen English trademark

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Date	Version	Content	
2020-09-10	1.0	Original release.	
2021-01-13	1.1	Changed the picture of first page.	

### Table 1 - Software Version



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### 1 OVERVIEW

HES9510-RM hybrid energy monitoring system is suitable for remote monitoring single/multi HGM9510N genset controllers, HGM9560 bus tie mains parallel controller, HES9510 hybrid energy controller, which can realize auto start/stop/closing/opening, data measurement, alarm display functions of controller. It fits with LCD display and touch screen, so as to make this module easy and reliable to use.

HES9510-RM controller based on high-end microprocessor design, communicates with HGM9510N genset controller and HES9510 hybrid energy controller via network interface, communicates with HGM9560 genset bus tie mains parallel controller via RS485. The parameters can be read directly through communication interface and displayed on the HES9510-RM screen, which can realize display general system layout and branch system parameters.

#### 2 PERFORMANCE AND CHARACTERISTICS

- Single or up to 6 HGM9510N genset controllers can be monitored remotely;
- Single HGM9560 bus tie mains parallel controller can be monitored remotely;
- Single HES9510 hybrid energy controller can be monitored remotely;
- High-end ARM microprocessor as the core, LCD with backlight, visualization display, touch screen operation;
- Real-time display genset parameters and alarm information that detected by controller;
- HES9510-RM visualization display monitors the detailed parameters of controller and is able to control the push-button operation;
- Modular design, pluggable wiring terminals, embedded mounting, compact structure and easy installation.



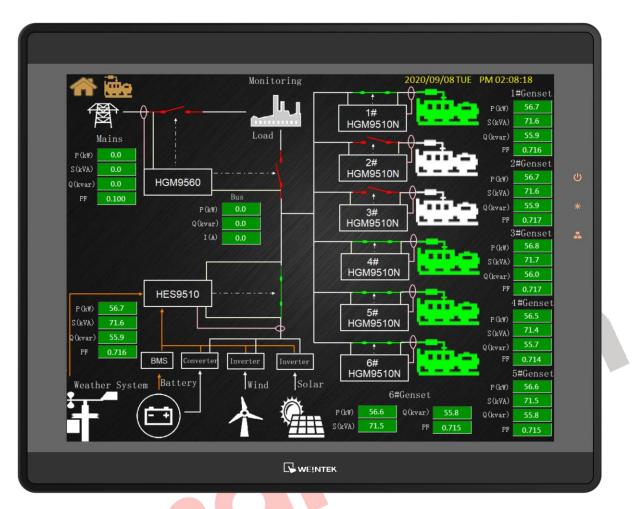


Fig.1 – System Monitoring Display Interface

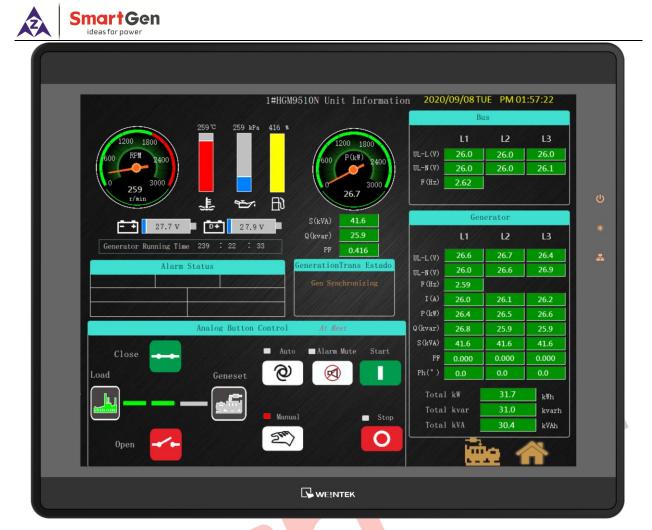


Fig.2 - Single HGM9510N Genset Information Display

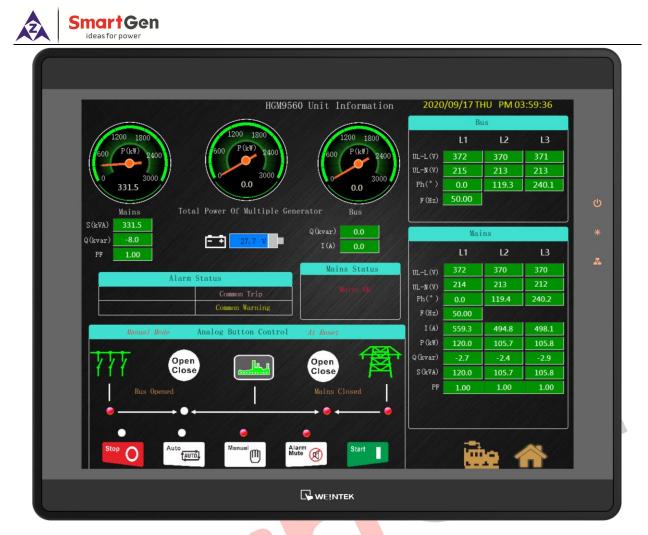


Fig.3 - HGM9560 Genset Information Display



Fig.4 - HES9510 Genset Information of Controller Display

The control keys on the interface of fig.2, fig.3 and fig.4 are the same as those on the controller panel, and the operation method is the same. The interface is icon of genset monitoring selection key; the interface is icon of returning to start.



#### 4 SYSTEM CONFIGURATION DESCRIPTION

Year Month Day Hour Minute Second	Configurat	ion		Lans	uage S	Setting				
2020 09 08 13 56 57 Mouse Cursor Setting	]			í体中文		RR E	nglish			
Show Hide				•		re sett nload			Q	
TD Enable Disable	1#HGM9510N		¥	→	Show		Hide		*	
Show 🔽 Hide	I#HGM9510N IP 2#HGM9510N IP	192 192	168 168	10 10	77 132	Port Port	502 502	Updata IP Updata IP		
Brightness Setting	3#HGM9510N IP 4#HGM9510N IP	192 192	168 168	10 10	177 104	Port Port	502 502	Updata IP Updata IP		
Number of Generating Sets	5#HGM9510N IP 6#HGM9510N	192 192	168 168	10 10	105 106	Port Port	502 502	Updata IP Updata		
	IP HES9510 IP	192	168	10	22	Port	502	IP Updata IP		ľ
COM1 RS232 -	9600	+	8bit	None	2bit	Updata	1			

Fig.5 - System Configuration Interface Display

During network IP setting in fig.5, the No.1 ~.6 IP addresses of HGM9510N and HES9510 are the controller IP addresses. The setting IP address should be in a LAN with the IP address of screen, the IP address of the screen should be set in the opening hardware setting dialog box.(enter password:11111). When the number of connected HGM9510N is more than 1, please configure interchanger by yourself.

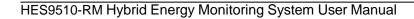


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o		•	⊙	
•	<b>FUSE 5.20</b> 0	0		



**Note:** Please unplug HES9510-RM power cable before wiring to avoid electric shock or accident. (Please refer to *HMU15 Installation Instruction*)

**Note:** HES9510-RM communicates with HGM9560 via RS485 communication port, using the matched communication wire, one end (DB9) connects with HES9510-RM. There're 6 wires of the other side, which are 2 RS485 communication ports. 1#485+ and 1#485 communication port connects with HGM9560.





6 OVERALL AND CUTOUT DIMENSIONS

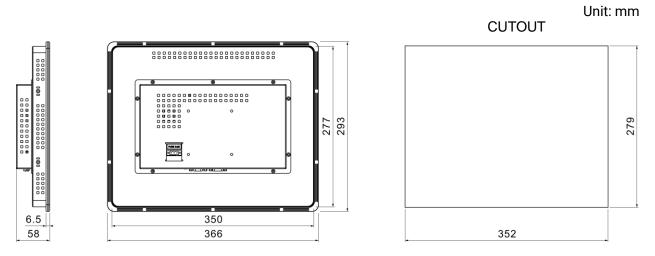


Fig.5 - Overall Dimensions

### 7 TROUBLESHOOTING

Please make sure that all cable connectors are securely connected to HES9510-RM;

Please make sure that the ground cable of HES9510-RM is grounded separately from the other equipment. In addition, cable with below  $100\Omega$  grounding resistance and above  $1mm^2$  cross sectional area is recommended or choose the cable according to the applicable standards in your country.

Please do not push hard or use hard objects press on the LCD screen of HES9510-RM.