



## HGM4020LT

HGM400LT series genset controllers designed especially for very low/high temperature (-40~+70°C) environment are integrate digitization, intelligentization and network technology which are used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measurement, alarm protection and “three remote” (remote control, remote measuring and remote communication; SG485 module must be fitted). It fit with LCD display, optional languages interface (simplified Chinese, English, Spanish, Turkish, Russian and French), and it is reliable and easy to use.

Product Code : 6010041

Power Supply : DC(8-35)V

Case Dimensions : 130 x 112 x 39(mm)

Panel Cutout : 110 x 90(mm)  
Operating Temp. : (-40~+70)°C  
Weight : 0.26kg

## **COMPLETE DESCRIPTION**

HGM400LT series genset controllers designed especially for very low/high temperature (-40~+70°C) environment are integrate digitization, intelligentization and network technology which are used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measurement, alarm protection and “three remote” (remote control, remote measuring and remote communication; SG485 module must be fitted). It fit with LCD display, optional languages interface (simplified Chinese, English, Spanish, Turkish, Russian and French), and it is reliable and easy to use.

HGM400LT series genset controllers adopt micro-processor technology with precision parameters measuring, fixed value adjustment, time setting and set value adjusting and etc. All parameters can be configured from front panel or through programmable interface (USB to LINK, SG72 adaptor produced by SmartGen is recommended) via PC. It can be widely used in all types of automatic genset control system with compact structure, advanced circuits, simple connections and high reliability.

## **PERFORMANCE AND CHARACTERISTICS**

HGM400LT series controller has two types:

HGM410LT: ASM (Automatic Start Module), it controls generator to start/stop by remote signal;  
HGM420LT: AMF (Auto Mains Failure), updates based on HGM410LT, moreover, has mains electric quantity monitoring and mains/generator automatic transfer control function, especially for automatic system composed by generator and mains.

1. 132x64 LCD with backlight, selectable language interface (simplified Chinese, English, Spanish, Turkish and Russian), push-button operation;
2. Widely temperature range: (-40~70) °C; adapt for rigorous environments;
3. Suitable for 3-phase 4-wire, 3-phase 3-wire, single phase 2-wire, and 2-phase 3-wire systems with voltage 120/240V and frequency 50/60Hz;
4. Collects and shows 3-phase voltage, current, power parameter and frequency of generator or mains.
5. For Mains, controller has over voltage, under voltage and loss of phase detection functions; For generator, controller has over voltage, under voltage, over frequency, under frequency and over current detection functions;
6. Precision collect and display parameters about Engine,
7. Control & Protection: automatic start/stop of the genset, ATS(Auto Transfer Switch) control with perfect fault indication and protection function;
8. With ETS(Energize To Stop), idle control, pre-heat control, speed raise control and speed drop control function, All output ports are relay-out;

9. Parameter setting: parameters can be modified and cannot be lost even in case of power outage; all the controller parameters can be adjusted using front panel of the controller or via PC using an S G72 adaptor;
10. Multiplex input port 3 and 4 can be used in various fields: input 3 can be used as auxiliary input port or fuel level sensor while input 4 can be used as auxiliary input port or configurable sensor;
11. More kinds of curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves;
12. Configurable sensor: can be set as temperature sensor, oil pressure sensor or fuel level sensor, enable the detection of double temperature, double oil-pressure and double fuel level;
13. Multiple crank disconnect conditions (magnetic pickup, oil pressure, generator frequency) are optional;
14. Widely Power supply range: DC(8~35)V, suitable to different start battery voltage environment;
15. All parameters used digital adjustment, instead of conventional analog modulation with normal potentiometer, more reliability and stability;
16. Modular design, self-extinguished ABS plastic enclosure, pluggable connection terminals and embedded installation way; compact structure with easy mounting.

### PARAMETER LIST

Function Item	Parameter
Display	LCD(132*64)
Operation Panel	PET
Language	Chinese & English & Others
Digital Input	4
Relay Output	6
Analogue Input	4
AMF	●
AC System	1P2W/2P3W/3P3W/3P4W
Alternator Voltage	(15~360)V(ph-N)
Alternator Frequency	50/60Hz
kW/Amp Detecting & Display	●
Monitor Interface	LINK
Programmable Interface	LINK

Function Item	Parameter
DC Supply	DC(8~35)V
Case Dimensions(mm)	130*112*39
Panel Cutout(mm)	110*90
Operating Temp.	(-40~+70)°C

### HGM4020lt Typical Application

