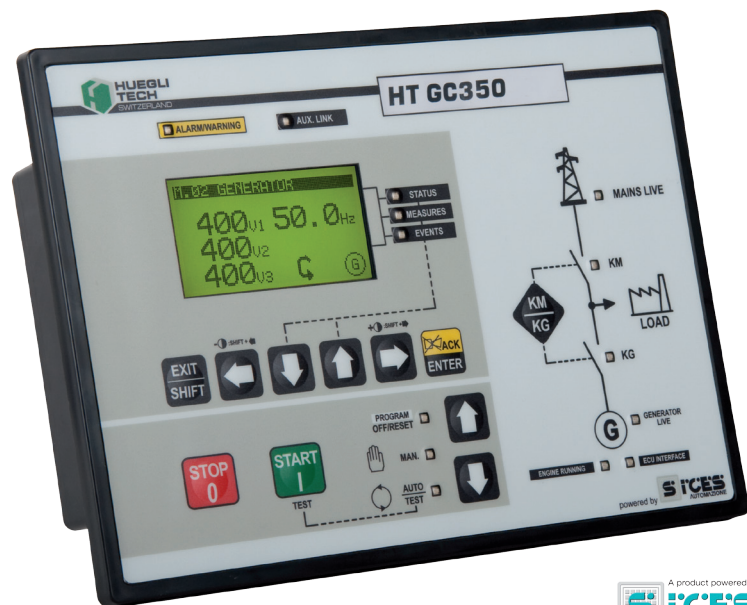


HT-GC350

Single Applications

- Three-phase AMF automatic genset controller
- True RMS readings on generator and mains voltages and currents
- Additional current measurement for neutral or differential protection
- Active, Reactive and apparent power measurement
- Frequency and power measurement on Mains input
- Graphic display (128 x 64 pixels)
- 18+3 configurable digital inputs
- 15 configurable digital outputs
- Up to additional 16 inputs and 16 outputs by means DITEL DEVICE
- RS232 interface port with Modbus RTU protocol
- Additional RS232 or RS485 interface serial port
- J1939 and MTU MDEC CAN interface
- Real Time Clock
- Events and data logging
- Engine speed measurement by pickup or VV
- GSM and PSTN modem management
- SMS communication
- ETHERNET interface (optional)



A product powered by
SICES
AUTOMAZIONE

Advanced AMF genset controller

This is an advanced and integrated controller for generator sets operating in single stand-by mode, particularly aimed for giving high performance benefits.

In addition to the features of the HT-GC310 controller the **HT-GC350 is equipped with an expansion I/O module which allows its use in customized and non-standard applications.**

It is able to communicate directly, via **J1939 CAN interface**, with a wide range of electronic engines (Volvo Penta, Scania, Perkins, MTU, Deutz, Cummins, John Deere, Caterpillar etc.) but it can also be used with conventional engines / sensors thanks to its embedded analogue interfaces.

A comprehensive set of adjustable parameters allows the controller to be easily configured to handle both standard applications and more specialized tasks.

The parameters and I/O functions are easily set in the **free BoardPrg software**, but can also be changed from the front panel.

HT-GC350 is able to measure the mains frequency and calculate power and energy even when the load is connected to the mains.

Events and DTC logs can be accessed from the front panel and presented on the display. HT-GC350 is supported by all standard HT/SICES communication tools and can be easily interfaced to any proprietary supervision system, thanks to its support of standard protocol.

HT-GC350 has a **4 wire RS232 or RS485 serial port** for I/O expansion and it allows the connection of the 'Gateway Modbus TCP/RTU' module Ethernet interface.

Technical Specification

Measured Values

Mains Voltages:

L1-L2, L2-L3, L3-L1

Lx-N max. voltage < 300Vac cat. IV

Generator Voltages:

L1-L2, L2-L3, L3-L1, True RMS measurement

Lx-N max. voltage < 300Vac cat. IV

Generator Currents:

L1, L2, L3, N True RMS measurement

Nominal max. current: 5Aac

Overload measurable current: 4x 5Aac (sinusoidal, max. 3 s)

Generator and Mains Frequency meter:

Resolution = 0.1 Hz

Accuracy = $\pm 50\text{ppm}$, $\pm 35\text{ppm}/^\circ\text{C}$ (typical)

Battery Voltmeter:

Resolution = 0.1V

Oil Pressure Gauge:

VDO 0-10 Bar, VDO 0-5 Bar, Veglia 0-8 Bar

Coolant Temperature sensors:

VDO, Veglia, BERU

Fuel Level:

VDO, Veglia, Generic max. 380 ohm

Engine revolution counter:

By pick-up or W. (programmable frequency/revolution ratio)

Other measurements are available by J1939 bus

Derived Values

Active power meter

Reactive power meter

Apparent power meter

Power factor: Total and phase by phase

Active and reactive energy counter

Hour counter

Hour counter for maint./rental

Start Counter

Engine Protections

Overspeed

Coolant temperature by digital or analogue sensor (warning and shutdown)

Oil pressure by digital or analogue sensor (warning and shutdown)

Fuel level digital by digital or analogue sensor (warning and shutdown)

Belt break

Maximum deliverable power

Overcrank and start failure

Generator Protections

Underfrequency (81U)

Overfrequency (81O)

Undervoltage (27)

Overvoltage (59)

Power direction (32)

Time dependent overcurrent (51)

Instantaneous overcurrent (50)

Phase sequence

Current and Voltage unbalance

Rated conditions failure

Differential protection (51N)

Inputs, Outputs and Aux. Functions

18 Programmable digital inputs

3 Analogue inputs, if not used, can be used as non-insulated digital inputs

1 Relay (3A) fuel solenoid

3 Relays (3A) programmable outputs

2 Relays (1A) programmable outputs

5 Relays (1A) outputs with common terminal for positive voltage

3 Relays (1A) normally open free potential outputs

2 Relays (1A) outputs with exchange contact.

2 SPDT (10A) relays for power changeover management

Embedded Functions

Engine diagnostic code

Periodical test.

Real Time Clock

Fuel pump management.

Pre-glow and coolant heater management

Remote start and stop

Maintenance working

Embedded alarm horn

Engine speed measurement by pick-up or W

Additional input and output using DITEL device

Standard Communication:

1 x RS232/RS485 Serial port (9-pin D-Sub, Modbus RTU)

1 x RS232/RS485 Serial port (4 x bare wire connection)

GSM and PSTN modem interface

SMS communication with GSM Modem

Optional Communication :

Ethernet connection via "Gateway Modbus TCP/RTU" module

Supervision software for remote control available

Other Technical Data

Supply voltage: 7...32 Vdc

Power consumption: typically less than 2W (AUTO mode, STANDBY, AMF active, LCD Lamp Saving active).

Operating frequency 50Hz o 60Hz

LCD: transfective with LED backlight

Operating temperature: -25 °C to 70 °C

Protection degree: IP55

Genset Controller

HT-GC350

Weight; 1050g
Overall dimension: 247x187mm (LxH)
Panel cut-out: 218x159 (LxH)
Graphic display dimensions: 70 x 38mm - 128 x 64 pixel
Specific function for French market EJP / EJP-T
EMC: conform to EN61326-1
Safety: built in accordance with EN61010-1

Certification

Marine Version certified by RINA: **HT-GC350R**



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