

Hybrid System Controller

INTRODUCTION

The HS315 aims to minimise generator run time and optimize both fuel consumption and running hours. This hybrid controller monitors the whole site DC voltages and currents along with the ability to communicate with smart batteries.

HS315 has been designed to control a DC generator and is able to monitor load and battery levels, as well as manage the automatic stop/start of the genset.

Specific functions have been included to ensure a comprehensive control and protection of the genset, the battery, the charging system and of an auxiliary renewable power source (if used).

Full control of the battery charging process, ensures maximum battery life, while reducing fuel consumption and service/maintenance on the engine.

The in-built Battery Management System (BMS) provides information such as charge level and remaining supply time estimation.

Configurable inputs and outputs are provided assuring the specific requirements of the application can be accommodated.

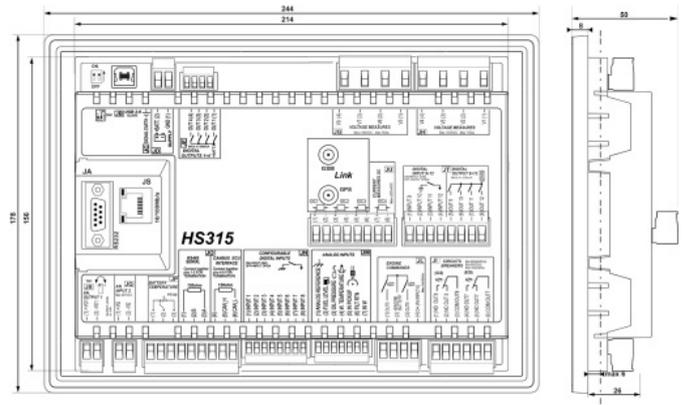


MAIN FEATURES

- Automatic start/stop of the genset, according to storage battery voltage and charge level
- Full 'Battery Management System' (BMS) built in, for maximum battery life and performance
- Voltage and current compensation according to battery temperature
- Storage battery level visualization
- Variable Speed control of the engine (PMG alternators) and/or excitation control
- Management of an auxiliary renewable power source (if used)
- Dedicated configurable inputs for DC voltages and currents
- Real time clock and event log
- Freely configurable timers
- Genset fuel consumption and maintenance reduction
- Several communication ports available

EMBEDDED FUNCTIONS

- Automatic/manual start with configurable start/stop timers
- Configurable inputs/outputs
- Storage battery visualizations:
 - temperature
 - residual charge
 - depth of discharge (DoD)
- Automatic start/stop based on storage battery status
- J1939 engine diagnostic codes reading
- Periodical test
- Real Time Clock with internal rechargeable Lithium battery
- External Fuel tank pump management
- 126 events log
- Remote start and stop
- 32 additional event log recording the charge/discharge of the storage battery
- Pre-heat and coolant heater management
- Hours counter for maintenance scheduling
- Daily counter with embedded calendar for maintenance scheduling
- Embedded alarm horn
- Engine speed measurement by pick-up, frequency, or W terminal
- Configurable by PC or controller's keyboard
- Remote encrypted firmware update
- SMS communication
- NTP, DHCP, DNS and SNMP Support



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HS315 COMMUNICATIONS

HS315

- USB port
- Serial port RS232 Modbus RTU (supports external modem)
- Insulated serial port RS485 Modbus RTU
- Ethernet port (RJ45) Modbus TCP
- Insulated CANBUS J1939 interface

HS315 Link

- USB port
- Serial port RS232 Modbus RTU (supports external modem)
- Insulated serial port RS485 Modbus RTU
- Insulated CANBUS J1939 interface
- GPRS/LTe/5G Modem
- GPS Antenna
- Motion sensor, accelerometer and gyroscope
- Compliance with CE1588

FURTHER CAPABILITIES

Expandable input and output capability with optional accessories, make this an extremely powerful DC genset controller.

HS315 is compatible with both electronic CANBUS J1939 and non-electronic engines.

All the parameters can be set directly by the controller's keyboard or alternatively using the free software tool.

Historical events and alarm logs can be accessed from the front panel and read on the display.

HS315 supports several communication interfaces for local or remote control.

HS315Link 5G has built in global 5G modem with global 2G fallback capability, which also utilises the GNSS localisation system (GPS/GLONASS/BD) to provide a highly accurate positioning system, that offers industry-leading accuracy and performance. Useful where asset tracking and monitoring are required.

TECHNICAL DATA

- Supply voltage 7-32V DC
- Power consumption: typically less than 2W (auto mode, standby, LCD lamp saving active)
- Operating frequency 50Hz or 60Hz (AC reading only)
- LCD with backlight
- Recommended operating temperature: -30°C to +70°C
- Burn in at 50°C for 48h with test report for each controller
- Protection degree IP65 (gasket included)
- Weight 750grammes
- Overall dimension 244(w) x 178(h) x 50(d) mm
- Panel cut-out: 218(w) x 159(h) mm
- Graphic display dimensions 70 x 38 mm (128 x 64 pixel)
- ECM conforms to EN61326-1
- Safety: built in conformity to EN61010-1



Mecc Alte Kit
Bundle Option



Lower Costs
Smart Logistics



User Friendly
Intuitive

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The information contained in this document is substantially correct at the time of publication but may be subject to change. Please work with your Mecc Alte contact to confirm details.



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POWER FROM WITHIN