GENSET CONTROL UNIT

MAGE DSP II

GENSET AND POWER PLANT CONTROL UNIT

MAGE DSP II is dedicated to the genset's control. Emerging from the first generation of numerical automatism MAGE DSP and using the latest industrial numerical technologies, it gives new advantages:

- Ease of use thanks to color display,
- Compact, only one set to have information and interface user/machine,
- More functions with especially graphic records,
- More possibilities for connections (port Ethernet),
- Large reliability: less components and connections.

MAIN FUNCTIONS

- **Genset start-up management,**
- **Faults monitoring and alarm,**
- **Change over management,**
- **Mains monitoring,**
- **Synchronization, coupling / load sharing,**
- **Power plant unit management (until 16 gensets),**
- **Genset state and measurement display,**
- **Display thanks to moving synoptics,**
- **Synchronoscope integrated.**
- **Graph display (such as galvanometers),**
- **Event log of the last 512 events,**
- **Historical display by graphic curves,**
- **Communication with others systems,**
- **More than 20 serial configurations basically available,**
- **Customized display and automatism (option),**
- **4 serial language : F, GB, I, DE.**

TECHNOLOGIES

- **Processor ARM : 32 bit (200MHz), this power allows more functions,**
- **Colors display: high definition allows a large comfort. High contrast thanks to TFT technology and white LED,**
- **Ports of communication: RS232, RS485, CAN, USB, Ethernet,**
- **Configuration, parameters, and events recorded on removable SD-Card memory,**
- **Current measurement with Hall effect sensor.**

FPT POWERTRAIN TECHNOLOGIES

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COMMUNICATIONS

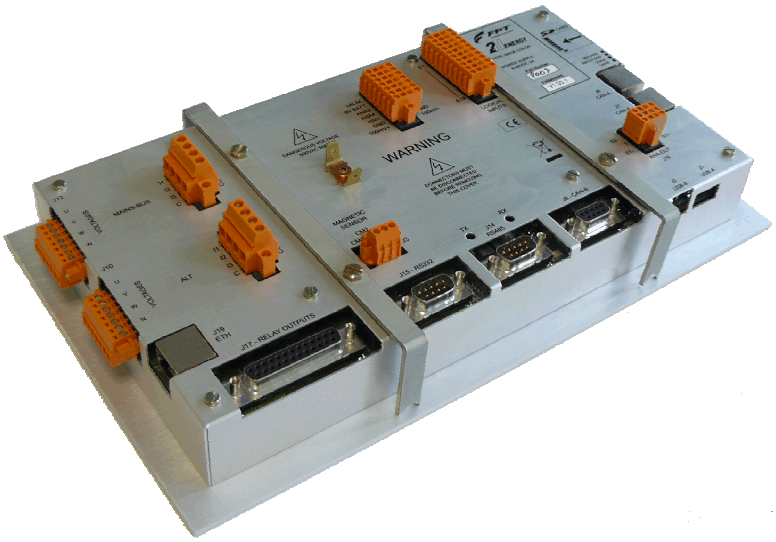
- **Bus Local CAN-A : CanOpen and SAE-J1939 protocol, this bus allows to increase Inputs / Outputs possibility with the optional ESD modules and also to communicate with the electronic engine controller (ECM).**
- **Bus Local CAN-B : This bus is designed to realize datas exchange between the different gensets of a power station.**
- **Serial ports : 1 port RS232c, 1 port RS422/RS485, 1 port USB : communication MODBUS slave.**
- **Port Ethernet 10BT : supported functions and protocols:**
  - **MODBUS TCP server : communication with supervision systems.**
  - **SNTP : Simple Network Time Protocol : to set date time via internet**
  - **SNMP : Simple Network Management Protocol : Version V2c**
  - **SMTP : Simple Mail Transfert Protocol : mail sending on fault detection**
  - **HTTP : Embedded Web Serve allowing the display on a internet browser synoptic et main measures, active alarms and the event log.**
  - **Display link : allows to have a second display of MAGE DSPII either on a second MAGE DSP II, either on a computer (with Remote Display software).**

CHARACTERISTICS

- **Power supply DC 8-36V, 12W typical, 21W max**
- **20 inputs on/off**
- **16 outputs for relay command**
- **8 analogical inputs :**
  - **5 resistance measurements (engine sensor)**
  - **Battery voltage measurement**
  - **+/- 10V measurement**
  - **+/- 100mV measurement**
- **2 isolated analogical outputs :**
  - **+/- 5V or 0-10V**
  - **Speed regulator monitoring**
  - **Voltage regulator monitoring**
- **Magnetic sensor input**
- **2 alternative circuits measurement :**
  - **Alternator and mains circuit (bus-bar)**
  - **3 phases voltage measurement with or without neutral**
  - **Frequency measurement: 10 to 500Hz**
  - **Intensity 3 phases (CT 5A) measurement**
  - **Active, reactive, apparent power, power factor**
  - **Phase displacement and harmonic content calculation**

- **Display :**
  - **LCD TFT 7 inches**
  - **800 X 480 pixels**
  - **Lighting with white Leds**
  - **Touch screen**

- **Dimensions: 300 X 170 X 49mm**
- **Operating temperature : -33°C to +70°C**
- **Storage temperature : -40°C to +80°C**
- **Vibration carriage : 2g from 2Hz to 100Hz**
- **IP65 protection of front face**
- **CEM : conformity CE N°89/336**
  - **Emission: EN 50081-1 et EN 55022 class B**
  - **Immunity : EN 50082-2, EN 610003 10V/m, EN 61000-4-6 (10V), EN 61000-4-4, EN 61000-4-2 and EN61000-4-8 (30A/m)**



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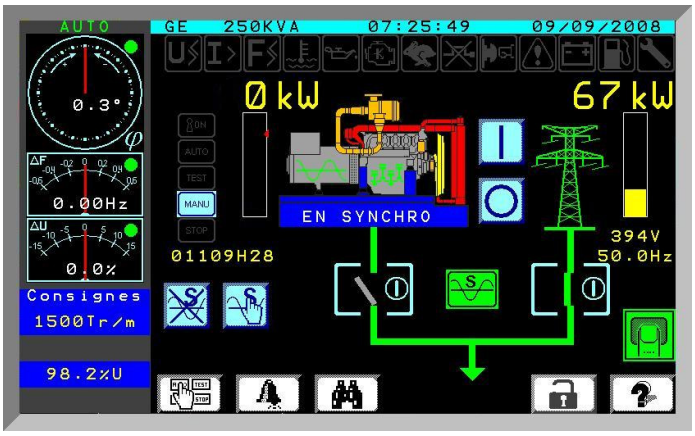
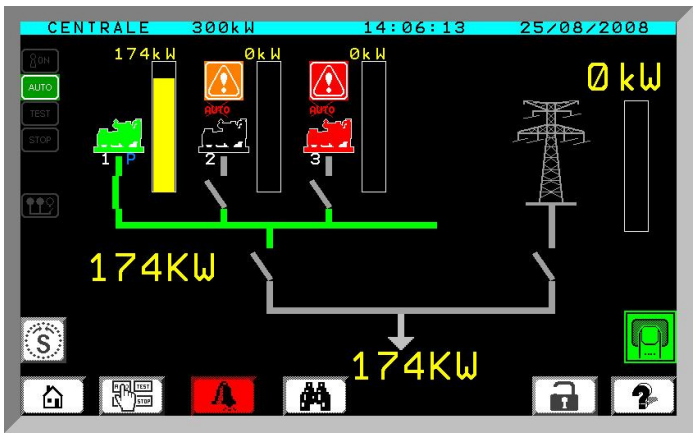
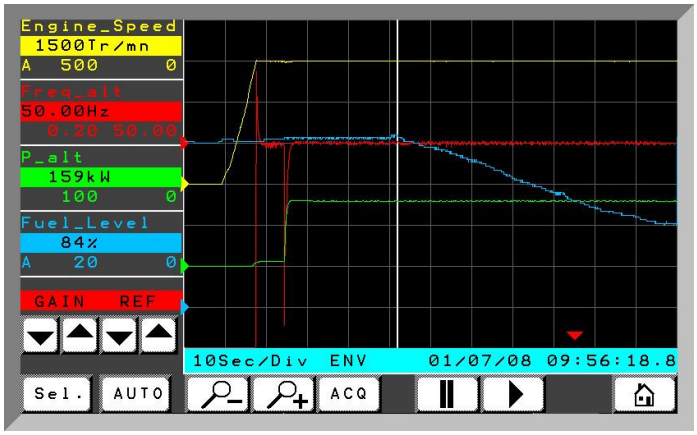
DISPLAY EXEMPLES



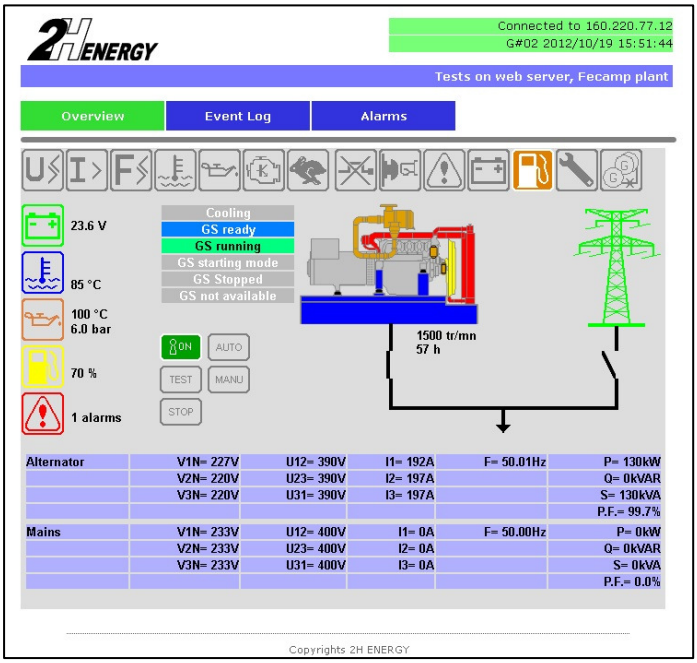
Genset synoptic



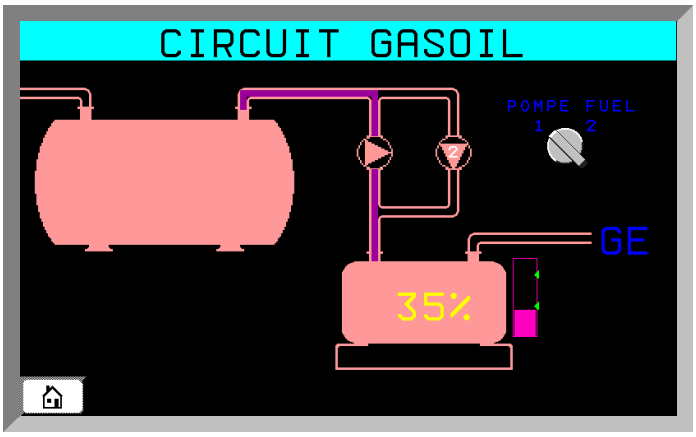
3 gensets power station synoptic



Measures graphical display



Embedded web server main page



Gasoil circuit representation

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