Function
The EGX400 server is used as an Ethernet coupler for the PowerLogic System devices and for any other communicating devices operating under the Modbus RS 485 protocol.
It contains HTML pages (set up using WPG) that can be accessed using a standard internet browser. The HTML pages are used to display the information provided by the devices connected to the server.

SMS software and internet browser
The EGX400 server makes it possible to implement two types of user interface:
- SMS power-monitoring software providing access to all status and measurement information. It also prepares summary reports
- a standard internet browser providing access to the main information organised in predefined HTML pages.

These two approaches, SMS and internet browser, are complementary:
- SMS offers complete access to all information, but must be installed on each PC
- the HTML pages offer partial access to the main information via any PC connected to the network.

Architecture

Setup
Initial setup
The initial setup is carried out using a PC connected to the EGX400 via an RS232 link. This setup:
- specifies the IP address of the EGX gateway
- selects the type of Ethernet port (wire or optic fiber)
- lists the connected products with their Modbus communication parameters.

Setup via the Ethernet network
Once connected to the Ethernet network, the EGX400 server can be accessed by a standard internet browser via its IP address to:
- create or update the list of the connected products with their Modbus communication parameters
- update the firmware.

Part number

<table>
<thead>
<tr>
<th>Merlin Gerin brand</th>
<th>Square D brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGX400</td>
<td>EGX400MG</td>
</tr>
<tr>
<td>EGX400</td>
<td>EGX400</td>
</tr>
</tbody>
</table>
# Ethernet EGX200 gateway

## Communication and supervision

### EGX200 and EGX400

<table>
<thead>
<tr>
<th>Feature</th>
<th>EGX200 and EGX400</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weight</strong></td>
<td>700 g</td>
</tr>
<tr>
<td><strong>Dimensions (H x W x D)</strong></td>
<td>25 x 190 x 115 mm</td>
</tr>
<tr>
<td><strong>Mounting</strong></td>
<td>Symmetrical or asymmetrical DIN rail</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>24 V DC</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-30 °C to +80 °C</td>
</tr>
<tr>
<td><strong>Humidity rating</strong></td>
<td>5% to 95% relative humidity (without condensation) at +40 °C</td>
</tr>
<tr>
<td><strong>Immunity in industrial environments</strong></td>
<td>EN 61000-6-2, EN 61000-4-2/3/4/5/8/11, EN 55022/FCC class A, UL508, cUL (complying with CSA C22-2 no. 14-M91)</td>
</tr>
<tr>
<td><strong>Serial ports</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Number of ports</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>COM1</strong> type</td>
<td>RS 485 (2-wire or 4-wire)</td>
</tr>
<tr>
<td><strong>COM2</strong> type</td>
<td>RS 232 or RS 485 (2-wire or 4-wire), depending on settings</td>
</tr>
<tr>
<td><strong>Protocol</strong></td>
<td>Modbus</td>
</tr>
<tr>
<td><strong>Baud rate</strong></td>
<td>38400 bauds</td>
</tr>
<tr>
<td><strong>Maximum number of directly connected devices</strong></td>
<td>32 per port, 64 in all</td>
</tr>
</tbody>
</table>

### Ethernet port

<table>
<thead>
<tr>
<th>Number of ports</th>
<th>EGX200</th>
<th>EGX400</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Types of ports</strong></td>
<td>One 10/100 base TX port</td>
<td>One 10/100 base TX port (multimode optic fiber)</td>
</tr>
<tr>
<td><strong>Protocol</strong></td>
<td>Modbus/TCP</td>
<td>Modbus/TCP</td>
</tr>
<tr>
<td><strong>Baud rate</strong></td>
<td>10/100 MB</td>
<td>10/100 MB</td>
</tr>
<tr>
<td><strong>Web server</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Memory for custom HTML pages</strong></td>
<td>None</td>
<td>16 MB</td>
</tr>
</tbody>
</table>

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1. Power connector.
2. Ethernet indication LEDs.
3. 10/100 Base TX port for connection to Ethernet via an RJ45 connector.
4. 100 Base FX port for connection to Ethernet via an optic fiber (EGX400 only).
5. COM1: terminal block for RS 485 serial link.
6. COM1 indication LEDs.
7. COM2: terminal block for RS 485 serial link.
8. COM2 indication LEDs.
9. Mini-switches for setup of COM1 and COM2 ports.
10. COM2: Sub D-9 connector for connection to the RS 232 serial link.
Installation

Side mounting on DIN rail

Front mounting on DIN rail
Function
Very easy to use, the WPG software tool generates HTML pages for the EGX400 server. It is used to:
- select the devices connected to the server
- transfer the HTML pages corresponding to the selected devices to the server.

The WPG tool can set up HTML pages for the following devices:
- Sepam Series 20, Sepam Series 40, Sepam Series 80 and Sepam 2000
- Masterpact equipped with Micrologic A, P and H control units
- Power Meter PM500, PM700 and PM800
- Circuit Monitor Series 2000, 3000 and 4000.

The WPG tool is PC software that can be used in three languages, French, Spanish and English.
To obtain WPG, contact your Schneider Electric representative.

HTML pages
Following transfer, the EGX400 contains HTML pages that can be used to remotely monitor equipment under secure conditions.
- 1st service level based on the summary pages.
- 2nd service level based on specific pages for each type of device.

Summary pages
Five summary pages are available for overall monitoring of the switchboard.
They present the main measurements recorded by the devices connected to the server.
- Page 1
  - 3-phase average rms current
  - active power
  - power factor
- Page 2
  - rms current per phase
- Page 3
  - demand current per phase
- Page 4
  - demand power
  - peak power
  - time-stamping data
- Page 5
  - active power
  - reactive power
  - date and time of last reset of energy meters.

Specific pages for each device
A number of specific pages present detailed information on each device for in-depth analysis, e.g.:
- operating information:
  - instantaneous current per phase
  - demand current per phase
  - active and reactive power
  - average voltage (phase-to-neutral and phase-to-phase)
  - maximum unbalance
  - power factor
  - frequency
- event information:
  - minimum and maximum current values
  - maximum demand current
  - date and time of last reset
- historical data:
  - recording over 38 days of three user-selectable parameters (energy by default), every 15, 30 or 60 minutes, with graphic display and data export to an Excel file.