SAFETY PRECAUTIONS

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Only qualified personnel should install this equipment. Such work should be performed only after reading this entire set of instructions.
- Turn off all power supplying the equipment before working on or inside power unit.
- Always use a properly rated voltage sensing device to confirm that all power is off.
- Before performing visual inspections, tests, or maintenance on this equipment, disconnect all sources of electric power. Assume that all circuits are live until they have been de-energized and tagged. Pay particular attention to the design of the power system, consider all types of power, including the possibility of backfeeding.
- Beware of potential hazards, wear personal protective equipment and carefully inspect the work area for tools and objects that may have been forgotten.
- The successful operation of this equipment depends upon proper handling, installation, and operation. Neglecting fundamental installation requirements can lead to personal injury as well as damage to electrical equipment or other property.
- Before applying power, ensure that all internal fuses are appropriate for the application.
- To download it:

Quick Start Checklist

1. Mount the unit.
2. Connect the power.
3. Configure the Ethernet communication settings via a web browser (using an Ethernet crossover cable) or via HyperTerminal (using a null modem cable, which is included in the TCSEAK0100 configuration kit [sold separately]).
4. Configure the serial port.
5. Wire the serial port.
6. Configure the IEC 61850 protocol (see PowerLogic G3200 user’s manual).

Installation Guide
G3200-216-319A1
12/2010

PowerLogic™ Ethernet Gateways
PowerLogic G3200 (ref. 59655)
Modbus-to-IEC 61850 Server

SAFETY PRECAUTIONS

INTRODUCTION
Box Contents
- G3200 unit and connectors
- Installation guide
Additional Resources
Documentation:
- PowerLogic G3200 Modbus-to-IEC 61850 Server's user's manual
To download it:
1. Go to www.schneider-electric.com
2. Type G3200 in the Search field.
3. Select the PowerLogic G3200 product range.
4. Go to the PowerLogic G3200 product range page, click Downloads.
5. Click on the User Guide or the Instruction Sheet you want to download.

Quick Start Checklist

1. Mount the unit.
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3. Configure the Ethernet communication settings via a web browser (using an Ethernet crossover cable) or via HyperTerminal (using a null modem cable, which is included in the TCSEAK0100 configuration kit [sold separately]).
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INSTALLATION

Dimensions

Powering the G3200

The G3200 module is powered by a 5 V DC supply. The power supply terminal block requires wires with a cross section of 0.5 to 2.5 mm² (AWG 24-10). Also see the G3200 wiring drawings on page 2.

In order to ensure surge withstand protection and comply with the IEC61000-4-4 Level 4, it is recommended to use a Schneider Electric surge arrester PWA (ref. 10368) and to win the equipment as described in the PowerLogic G3200 user’s manual.

Ethernet Configuration

Select a G3200 module using the G3200 setup utility. Specify the unit, the media type, and the baud rate you will be using. For additional information on the telecommunication options available on your equipment, see the manual of your network administrator.

Ethernet Setup Using a Web Browser

1. Disconnect your computer from your network.
2. Start your web browser.
3. Enter the URL in the address field, type g3200set4.exe, and then press Enter.
4. Select the media type (see Table 1 for a description of each option).
5. Enter your IP address, subnet mask, and default gateway address assigned to your G3200 by your network administrator (see Table 1 for a description of each option, and then click Apply).
6. If you assigned a static IP address to your computer in step 3, you must reconfigure your computer’s original settings. Reconnect your computer to your network.

Table 1: G3200 Ethernet and TCP/IP Settings

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Type</td>
<td>Used to define the physical Ethernet connection.</td>
<td></td>
</tr>
<tr>
<td>10T</td>
<td>10BaseT-HD</td>
<td></td>
</tr>
<tr>
<td>100T</td>
<td>100BaseTX-FD</td>
<td></td>
</tr>
<tr>
<td>100T/100Tx</td>
<td>100T/100Tx-HD</td>
<td></td>
</tr>
<tr>
<td>100T/100Tx/FD</td>
<td>100BaseTX-FD</td>
<td></td>
</tr>
<tr>
<td>100T/100Tx/Tx</td>
<td>100T/100Tx/100T/100Tx-HD</td>
<td></td>
</tr>
<tr>
<td>Default</td>
<td>Default: 100BaseTX-Tx</td>
<td></td>
</tr>
<tr>
<td>P Address</td>
<td>Used to enter the MAC address of the G3200. Note: If you assign a static IP address, you must then enter the IP Address [see Table 1 for a description of each option].</td>
<td></td>
</tr>
<tr>
<td>8-0-0-0 to 255-255-255-255</td>
<td>Default: 127.0.0.0</td>
<td></td>
</tr>
<tr>
<td>Default</td>
<td>Default: 127.0.0.0</td>
<td></td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>Used to enter the Ethernet IP address mask of your network.</td>
<td></td>
</tr>
<tr>
<td>8-0-0-0 to 255-255-255-255</td>
<td>Default: 255.255.255.0</td>
<td></td>
</tr>
<tr>
<td>Default</td>
<td>Default: 255.255.255.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: G3200 Setup Utility Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Used to select the language for the current HyperTerminal session.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Used to enter the static IP address of the G3200. NOTE: If you enter an IP address that is already in use, you are prompted to enter a different IP address.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Used to enter the subnet mask of your network.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Used to enter the gateway address used for wide area network (WAN) communications.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Used to define the physical Ethernet connection.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Saves the settings and exits the current utility.</td>
<td></td>
</tr>
</tbody>
</table>

Ethernet Setup Using HyperTerminal

1. Attach an Ethernet crossover cable to the RJ45-to-DB9 adapter (see PowerLogic G3200 user’s manual).
2. Connect an Ethernet crossover cable from the G3200 to the computer.
3. Start your web browser.
4. Enter the IP address used in step 1, and then press Enter.
5. Select the media type (see Table 1 for a description of each option).
6. Enter your IP address, subnet mask, and default gateway address assigned to your G3200 by your network administrator (see Table 1 for a description of each option, and then click Apply).
7. If you assigned a static IP address to your computer in step 3, you must reconfigure your computer’s original settings. Reconnect your computer to your network.

NOTE: The RJ45-to-DB9 adapter and the Ethernet crossover cable are included in the TCSEAK0100 configuration kit (sold separately).

With Windows running, Click Start + Run, and then type hyper. Click OK.
In the Name text box, type a name for the new connection (for example, G3200config) and then click OK.
In the Connect using drop-down list box, select the com port you will be using, and then click OK.
Set COM properties as follows: Bits per second = 19200, Data bits = 8, Parity = None, Stop bits = 1, and Flow control = None.
Click OK.
Start the G3200 setup utility by doing the following:
• Open a command prompt and enter the command G3200set4.exe start on the computer exposed to access the setup utility. See Table 2 for a description of the setup options.

NOTE: The PowerStatus LED stops blinking after 5 seconds.
RS485 Wiring

2-wire Network

RS485 2-wire Network

RS485 2-wire Network

4-wire Network

RS485 4-wire Network

RS485 Blasing and Termination

RS485 Blasing and Termination

Table 4: Daisy Chain Maximum Distances

Table 5: RS485 DIP Switch Settings