1. Connect devices

   Connect external devices
   
   Choose serial interface
   
   RS232
   
   RS485
   
   For EC220 I/O signals - See section "A" on reverse side before proceeding to the next step.

   Go to step 2
   
   Note! Before using your device follow all the steps.

2. Network connection

   Connect to your GPRS network!
   
   GPRS
   
   If not using a Netbiter SIM card make sure the SIM PIN code security is disabled!
   
   To disable the PIN code security insert the SIM card in a regular phone and follow the instructions provided by the manufacturer.
   
   Insert SIM card at the bottom of the Netbiter EasyConnect EC220. The SIM card shall be placed as shown in the picture.
   
   To complete the GPRS setup, the module must be activated on www.netbiter.net.

   Go to step 3
   
   Note! Before using your device follow all the steps.

3. Power

   Power on the module!
   
   You can only use 9-24 VDC!

   Connect 9-24 VDC to pin +Vdc.
   
   Ground to pin GND
   
   Go to step 4
   
   Note! Before using your device follow all the steps.

4. Status LED

   Module status LED indication
   
   Description and actions
   
   Normal
   
   The module is operating in normal mode.
   
   Not registered on home network
   
   Verify that the SIM card is properly installed and PIN code security is disabled.
   
   If the state persists there is no signal for your GPRS network.
   
   Problem with Network settings
   
   No APN
   
   There is no Access Point Name, APN, set for the EC220. The APN must be set from Netbiter Argos. See section C for instructions.
   
   No connection to Netbiter Argos
   
   The EC220 has no connection to netbiter.net.
   
   Make sure that the APN is correct. See section C for instructions.
   
   Low signal
   
   Make sure that the antenna is correctly mounted and pointing upwards. Use another external antenna or try to move the antenna using extension cables.
   
   Medium signal
   
   Try different antenna placements to improve reception.
   
   Good signal
   
   This indicates an optimal setup.

5. LED descriptions

   Name | Color | Function
   
   Power | OFF | No power
   
   Green | Turned on
   
   Status | OFF | No signal
   
   Red | See step 4
   
   Running | OFF or ON | Not running
   
   Blinking | Normal / Running
   
   GSM Signal | Green | See step 4
   
   Note! Before using your device follow all the steps.

1. Make sure PIN code security is disabled!

2. Power on module.

3. Check that the GSM Signal LED indicates green (see table below).

4. Go to section B to finish the configuration on www.netbiter.net.
**Activate the Netbiter gateway**

The Netbiter gateway has to be activated before it can start to communicate with Netbiter Argos. In order to complete this procedure you need to have the System ID and Activation Code at hand. The System ID and the Activation Code are provided on the Netbiter Argos information note supplied with the Netbiter gateway.

If you do not have an account on Netbiter Argos:
1. Go to Netbiter Argos (www.netbiter.net) and click on the Create an account link.
2. When the new account is created, follow the instructions and login to the new account.
3. Click on the Online guide icon and follow the instructions on how to Add and activate a system.

If you want to use an existing Netbiter Argos account:
1. Go to Netbiter Argos (www.netbiter.net) and login to your account.
2. Click on the Online guide icon and follow the instructions on how to Add and activate a system.

**Online Guide**
The online guide is accessed by clicking on the wand in the upper right corner, as shown in the image.

**Mobile communication**
If mobile communication is being used:
- The phone number for the SIM card is needed.
- The access point name (APN) for the SIM card is needed.
- Enter username and password if required by the operator.
- Make sure that the SIM pin code security is disabled on the SIM card.

If a Netbiter SIM card is being used, the APN settings will be pre-configured on Netbiter Argos and the pin code is disabled on delivery.

The phone number and APN information should be supplied with the SIM card (if not, please contact the operator for correct information).

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**Technical details**

- **Power Supply**: 9-24 VDC
- **Temperature range**: Operating: -30 °C to +65 °C, Storage: -40 °C to +80 °C
- **Mounting option**: Wall mounting, DIN rail (EN 50322), Optional
- **Antenna connector**: SMA female
- **GPRS**: Quad band, GSM 850/1800/1900MHz
- **GPS**: GPS/GPS Class 12

**Other accessories**

- **GPRS Class 12**
- **Quad band: GSM 850/900/1800/1900MHz**
- **SMA female**
- **Antenna connector**

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**EasyConnect Series Accessories**

- **Order Code**: E-020
- **Description**: IOX-DIO
- **Order Code**: E-021
- **Description**: IOX-8AIV
- **Order Code**: E-022
- **Description**: IOX-6RTD
- **Order Code**: E-023
- **Description**: IOX-DAIO
- **Order Code**: E-024
- **Description**: IOX-8AIIS
- **Order Code**: E-025
- **Description**: IOX-CH1

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**Serial communication**

- **RS485 (Isolated)**
  - A: Modem A
  - B: Modem B
  - COM: Common

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**System ID and Activation Code**

- **System ID**
- **Activation Code**

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**Web**: www.netbiter.net
**Support**: support.netbiter.com
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**Phone**: +46 (0) 35 - 17 29 20
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**Netbiter® I/O Extender series** is a collection of analog and discrete I/O modules with Modbus-RTU protocol communication.

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**EasyConnect EC220 Installation Guide**

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