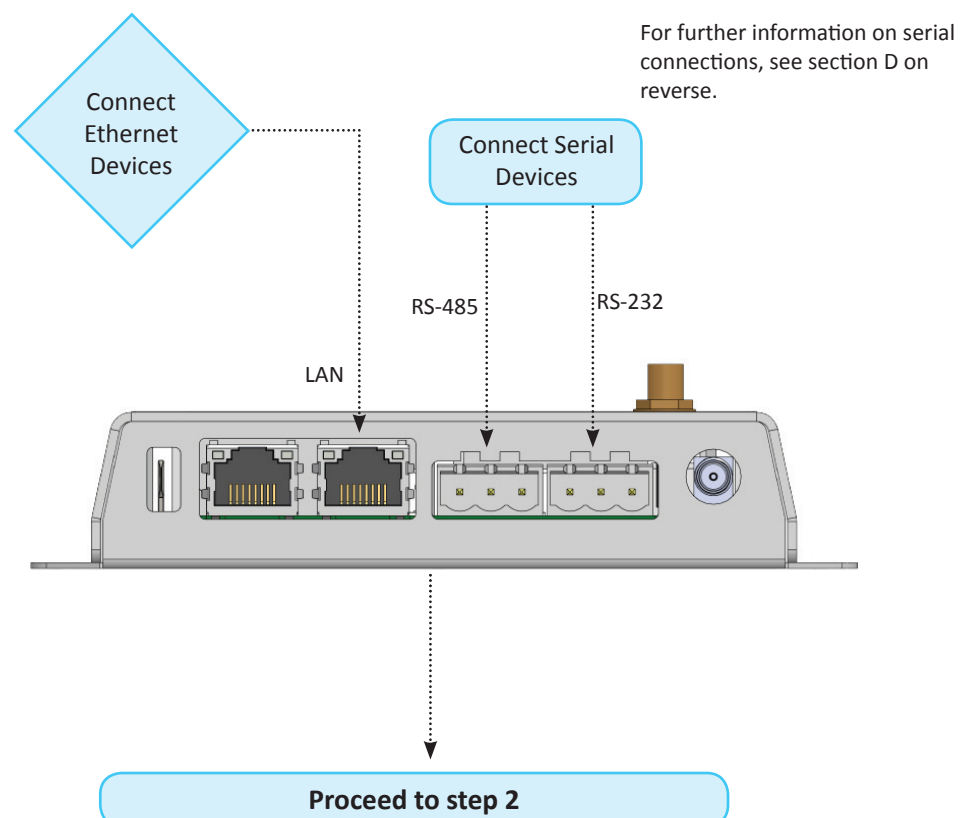


1

Connect devices



3

Apply Power

Connect 12–48 VDC to pin +
Connect Ground to pin -



Apply power

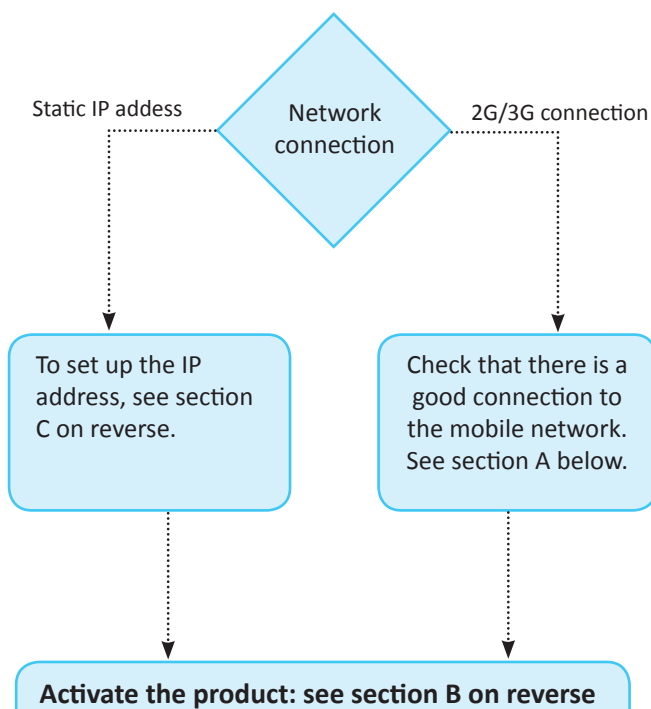


12–48 VDC
Only!

For Static IP address or 2G/3G: go to step 4
Otherwise: see section B on reverse

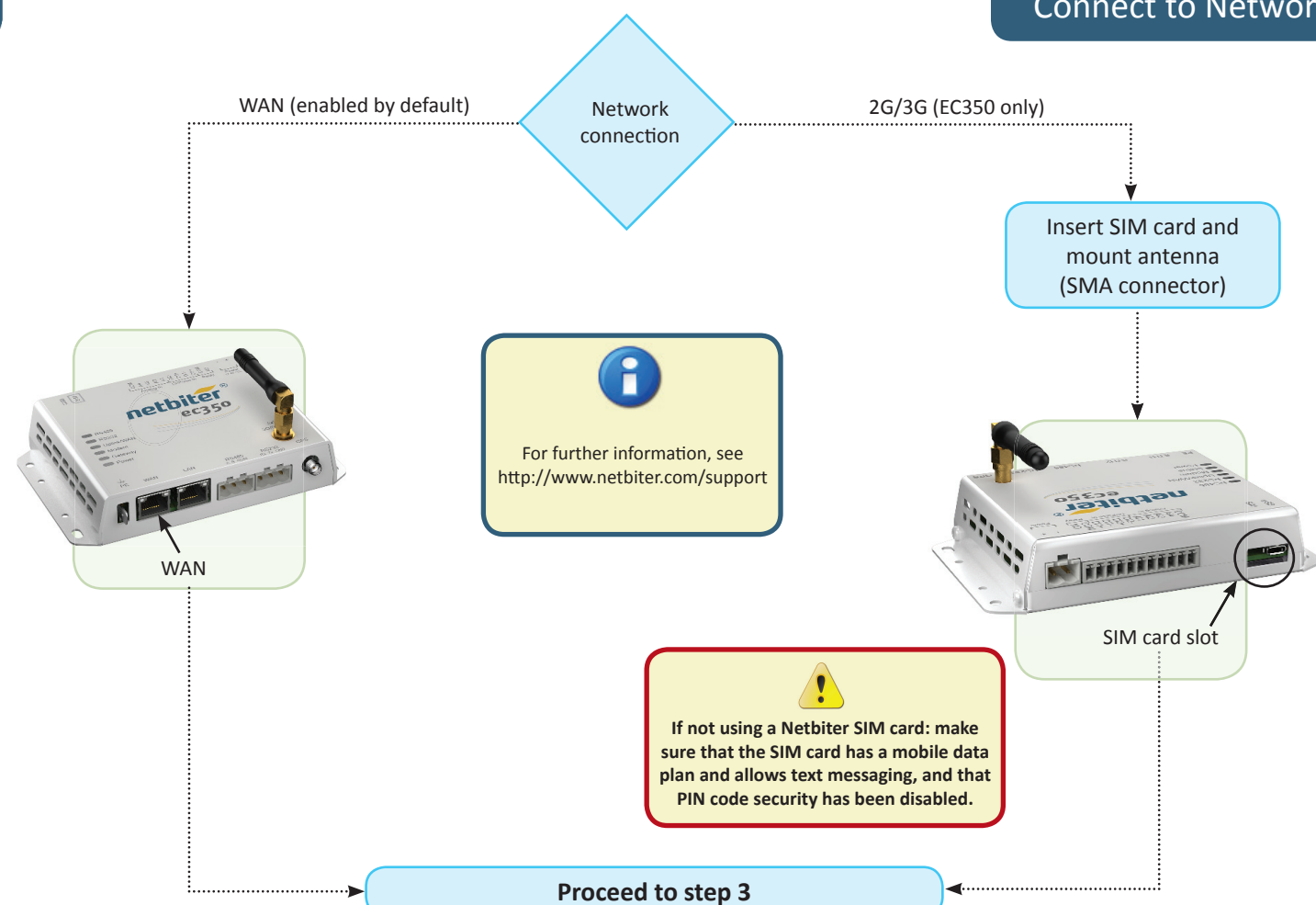
4

Setup



2

Connect to Network



A

LED descriptions

LED Name	Color	Indication	Possible actions
RS485/RS232	OFF	Port disabled.	
	Steady red	Port failure.	Contact support.
	Steady green	Port enabled from Netbiter Argos.	
Uplink/WAN	Steady green	Connected to Netbiter Argos.	
	Steady red	Incorrect IP settings.	Dynamic IP address - check for DHCP server on network. Fixed IP address - check the settings for IP address, gateway and DNS servers.
	Flashing red	Unable to connect to Internet/Netbiter Argos.	Check network settings and firewalls.
Modem (EC350 only)	OFF	Modem disabled.	
	Steady red	Modem failure.	Contact support.
	Flashing red	SIM card failure.	Check that the SIM card is correctly inserted and not damaged.
	Steady orange	PIN code enabled on SIM card.	Disable PIN code on the SIM card.
	Flashing orange	No APN server specified.	The APN (Access Point Name) Server must be set from Netbiter Argos. See section B.
	Steady green	Modem registered on mobile network.	
	Flashing green	Modem is searching for mobile network.	
Gateway	OFF	Unit has no power, or is starting up.	
	Steady green	Normal operation.	
	Flashing green	Firmware update in progress.	
	Steady red	Hardware failure - contact support.	
Power	OFF	No power.	
	Steady green	Unit has power.	
Ethernet Link (located on RJ-45 ports)	OFF	No network detected.	
	Orange flicker	Activity on 10 Mbps Ethernet network.	
	Green flicker	Activity on 100 Mbps Ethernet network.	



To check the mobile signal strength on EC350: Press and release the **Mode** button (see section D). The top 5 LEDs will now show the signal strength:

- 1 Flashing Red LED: No/unknown signal
- 1 Flashing Orange LED: Poor signal
- 1 Flashing Green LED: OK signal
- 2-5 Flashing Green LEDs: Good to optimum signal

The LEDs will automatically return to showing the standard indications after 60 seconds.

B Activate the Netbiter EasyConnect

Before communicating with Netbiter Argos, the Netbiter EasyConnect must be activated. This requires the **System ID** and **Activation Code**, both of which are provided on a printed sheet together with the Netbiter.

To open a new account on Netbiter Argos:

1. Go www.netbiter.net and click on the [Create an account](#) link.
2. Follow the instructions and log in to the new account.
3. Select the primary use for the unit and click on the [Activate](#) button.

To use an existing Netbiter Argos account:

1. Go to www.netbiter.net and log in to your account.
 2. Go to the menu **Management >> All Systems >> Add system**
- See the online help if required.

Requirements for Mobile Communication

The information listed below should be entered at Netbiter Argos, at the **Mobile Network** configuration page, under the management tab for the system.

- The phone number for the SIM card.
- For a SIM card supplied by another operator, the access point name (APN) for the SIM card is also required. Enter the username and password if required by the operator.

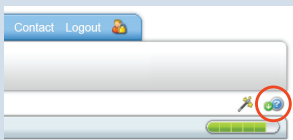
The phone number and APN information should be supplied with the SIM card. If not, please contact the operator for the correct information.

Note that for a SIM card from another operator, the PIN code must be disabled.

- i** For a Netbiter SIM card, the APN settings are pre-configured on Netbiter Argos and the PIN code is disabled upon delivery.

Online Help

The online help is accessed by clicking on the icon in the upper right corner, as shown here.



- i** Once the Netbiter is online at Netbiter Argos, please check that the unit is running the latest firmware.

C Manual WAN Configuration

Use the IPconfig tool to set up a static IP address, gateway or DNS server for the WAN port on the Netbiter EasyConnect.

About the IPconfig Utility

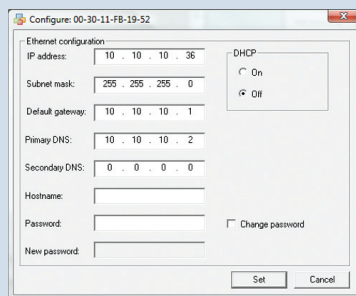
The Windows-based IPconfig utility is used for making TCP/IP network settings in the Netbiter. The utility scans the Ethernet network for connected Netbiter devices and allows the user to set the IP address, net mask, gateway, DNS and hostname for each unit.

Installation Procedure

Download and run the self-extracting installation package **IPconfig** from <http://www.netbiter.com/support>

Scanning for connected devices

Ensure that the Netbiter units to be installed are connected on the same Ethernet network as the PC running IPconfig. Use standard Ethernet cables, straight-through or crossover. When IPconfig is started it will scan the Ethernet network for Netbiter devices. All detected devices will be presented in a list in the main window. To start a new scan for devices, click the **Scan** button.



Changing IP settings

To change the IP settings for a detected device, double-click the device in the list. This opens a dialog from which the required IP configuration can be made.

The default password for authentication of the new settings is the **Activation Code**. Clicking **Set** will cause the Netbiter device to reboot, after which the new settings will be enabled.

- i** NOTE: The new settings can be tested by opening a web browser and entering the IP address as configured above. To discover the device's IP address when using DHCP - start a new scan with the IP Config utility to view the new network configuration information.

- !** IMPORTANT! Do not select the DHCP option if there is no DHCP server available on the network.

E Technical Specifications

Order Code
EC310: NB1007
EC350: NB1005
EC350 (no antenna): NB1008

Mobile communication (EC350 only)
5-band 3G/UMTS (WCDMA/FDD):
800/850, 900, 1900, 2100 MHz
Quad-band GSM/GPRS: 850, 900, 1800, 1900 MHz

1 Relay Output

2 Digital Inputs (dry contact type)

4 Analog Inputs
All 4 with support for V, mA
2 with support for Pt100

Serial Port #1
RS-232 (Tx, Rx, GND)

Serial Port #2
RS-485

Antenna Connector Mobile (EC350 only)
SMA female

Antenna Connector GPS (EC350 only)
SMA female (active or passive antenna)

USB Interface
Micro USB, USB 2.0

Protocols
Modbus RTU

Mounting
DIN rail (EN 50022)
Wall mounting

Dimensions (H x W x D)
25.6 x 135 x 92 mm

Temperature
Operating: -40 °C to +65 °C
Storage: -45 °C to +85 °C

Humidity range
5-95 % RH, non-condensing

Power Supply
12-48 VDC, 6 W, LPS

Power Consumption, typical
EC310: 2.5 W
EC350: 4.5 W

Certifications
EC310: CE, ROHS, ^cUL_{US}
EC350: CE, ROHS, Telec
JATE, ^cUL_{US}, FCC, IC, PTCRB, RCM

Certifications Pending
EC310: ATEX/Haz.Loc
EC350: ATEX/Haz.Loc

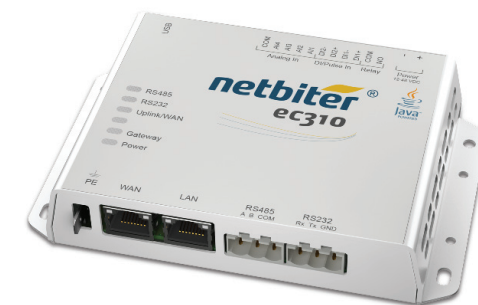


Package Contents

Item	Description
NB1005 or NB1008 or NB1007	EC350 EC350 (no antenna) EC310
Connectors	Screw connectors for I/O, RS-232 and RS-485 terminals
System ID/Activation code	Printed document with ID and code required to install product
Installation Guide	This document
Stub antenna (NB1005 only)	Female SMA connector

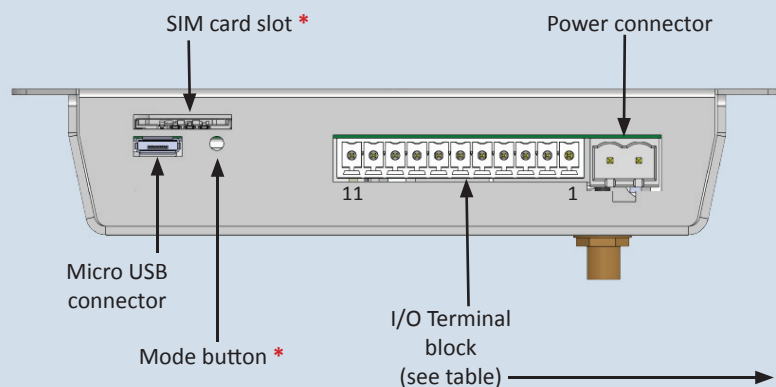
netbiter®

Netbiter EasyConnect EC310 Netbiter EasyConnect EC350 Installation Guide



SP1829, Rev. 1.40, July 2015

D Connectors and I/O's - Top



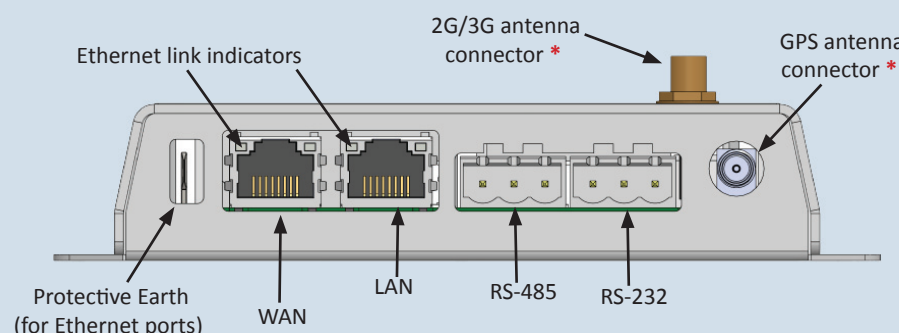
* Netbiter EC350 only

Connections on I/O Terminal Block

Pin	Label	Description
1	(Relay) NO	Relay Output, NO, Isolated
2	(Relay) COM	Relay Output, COM, Isolated
3	(DI/Pulse In) DI1+	Digital input 1 current source
4	(DI/Pulse In) DI1-	Digital input 1
5	(DI/Pulse In) DI2+	Digital input 2 current source
6	(DI/Pulse In) DI2-	Digital input 2
7	(Analog In) AI1	Analog Input 1
8	(Analog In) AI2	Analog Input 2
9	(Analog In) AI3	Analog Input 3
10	(Analog In) AI4	Analog Input 4
11	(Analog In) COM	Analog Ground

- !** • Do not connect power to digital inputs!
• Relay max 24V AC/DC, 1A

Connectors - Bottom



3-pin RS-485 Connector

Pin	Description
A	RS-485 Line A (+)
B	RS-485 Line B (-)
COM	ISO GND (Isolated ground)

3-pin RS-232 Connector

Pin	Description
Rx	Rx Recieve Input RS-232
Tx	Tx Transmit Output RS-232
GND	Signal ground

Field wiring terminals shall be connected with minimum wire size 24 AWG

HMS

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