



EasyConnect EC250 Starter kit

Get Started with EasyConnect



HMS Industrial Networks AB

Post address: Box 4126 300 04 Halmstad SWEDEN Visitor's address: Stationsgatan 37 302 45 Halmstad SWEDEN Telephone: + 46 35 17 29 00 Fax: + 46 35 17 29 09 Doc: SP1431, Rev: 1.21

E-mail: info@hms-networks.com Web: www.netbiter.com



1. Checklist of Contents

Netbiter EC250	
Netbiter IOX-DAIO	
Power Supply	
Power cables, UK, US and EU	
Cable kit (Temp. sensor, RS-485, Power)	O
5m extension antenna, magnetic foot	
Netbiter SIM card	194-
Temperature sensor	





Page 3 (15)

Hardware installation 2.

2.1 Connect the Temperature Sensor

- 1) Open the housing of the temperature sensor by pushing in the plastic tab, as indicated by the arrow below.
- 2) Connect **both** white wires to terminal 1 (both to the same).
- 3) Connect the brown wire to terminal 2.

The other ends of the wires should be connected to the Netbiter IOX-DAIO.

- 4) Connect one white wire to terminal 1a (pin 1)
- 5) Connect the other white wire to terminal 1b (pin 2).
- 6) Connect the brown wire to terminal C (pin 5).
- 7) Check that the jumper switches on the IOX-DAIO are in the correct positions. The first switch should be in the upper position, and the rest in the lower position.









2.2 Connect the Netbiter IOX-DAIO to Netbiter EC250

- 1) On IOX-DAIO, connect Pin A \rightarrow Pin TD(A) (pin 14) on the EC250.
- 2) On IOX-DAIO, connect Pin B \rightarrow Pin TD(B) (pin 13) on the EC250.



- 3) On IOX-DAIO, connect +24V DC \rightarrow V+ (pin 24) on the EC250.
- 4) On IOX-DAIO, connect OV DC
- \rightarrow GND (pin 23) on the EC250.





 \rightarrow V+ (pin 24) on the EC250 6) On IOX-DAIO, connect OV/C (pin 18) \rightarrow GND (pin 23) on the





DU

RD(B TD(A) 485 TD(B)



EC250



1

Netbiter EC250 Get started with EasyConnect Rev. 1.21

2.3 Connect Ethernet cable

NB! If using a SIM card to connect via a cellular phone network, this step should be omitted.

- 1) Insert an Ethernet cable with an RJ-45 plug into the Netbiter EC250.
- 2) Connect to a network with Internet access.



2.4 Insert SIM Card

NB! If connecting via an Ethernet network, this step should be omitted.

- 1) Open the SIM card holder by pushing the small yellow button next to the SIM card holder on the left of the EC250.
- 2) Insert the SIM card, with the gold-colored connection area facing as shown in the illustration.
- 3) Re-insert the SIM card holder.



2.5 Connect the Antenna

NB! If connecting via an Ethernet network, this step is not required.

Connect either the angled antenna or the magnetic foot antenna to the antenna screw connector on the top of the Netbiter EC250 unit.







1





2.6 Connect the Power Supply

Connect the cables of the power supply to the Netbiter EC250, as shown in the illustration.

- Connect the red wire to the V+ terminal (pin 24)
- Connect the black wire to GND terminal (pin 23)

Note that as there are already 2 wires connected to each power terminal, it may be convenient to use an extra terminal block.

2.7 Check LED Indicators

Check the **Module Status** indicator LED for the status of the Netbiter EC250. The **Module Status** LED indicates both the **Signal strength** and **System** messages. These indications are displayed in 4-second

cycles, in which the signal strength is shown for 2 seconds (green), followed by System messages for 2 seconds (red).

System Messages when Connected via Ethernet



Check that

- If set to DCHP check that there is a DHCP server on the network.
- If set to static IP address, make sure that the IP address, gateway and DNS are correct.

Three red flashes:

Check that port 443, 80 or 5222 is open in the firewall.

System Messages when Connected to Cellular/GSM Network

Two or three red flashes:

This is correct behaviour when connecting to a mobile network and is due to the fact that the Netbiter EC250 does not yet have any APN settings. This is configured at Netbiter Argos and will be transmitted to the Netbiter EC250.







Signal Strength Indications for Cellular/GSM Networks

The strength of the mobile network signal is indicated as shown in the table below.

signal	Low signal	 One (1) flash indicates a poor signal. The gateway might be able to connect to the GSM network, but the connection it probably not be stable or reliable. Make sure the antenna is correctly mounted and points upwards. Improve antenna reception by trying a different antenna placement. If possible, use another external antenna
GSM	Medium signal	Two (2) flashes indicate an acceptable, although not optimal signal. Improve antenna reception by trying a different antenna placement.
	Good signal	Three (3) flashes indicate a good and stable signal on the GSM network.





3. Create a Netbiter Argos Account

All configuration and management of the Netbiter EC250 unit is done online at the Netbiter Argos website. This section goes through the steps to create and activate an account on Netbiter Argos, as well as the procedure for getting the first system up and running.

- 1. Open a web browser and navigate to https://www.netbiter.net.
- 2. Click the **Create an account** link.
- 3. Fill in the account information in the form. Make a note of your account name and password, as these will be used when accessing the account.

U	Jser:	
Passw	vord:	
		Lanas
		Log

Fields marked with a red asterisk (*) are required for creating the account.

Create Account				
Account name*				netbiter argos
Password*				Netbiter Argos Activation Details
Repeat Password*				Netbiter is a complete m2m remote management solution that enables you to monitor, control and supervise the performance and operation of remote equipment and installations via Ethernet, GSM, GPRS or 3G networks.
First Name*				Read more at www.netbiter.com
Last Name*				SYSTEM ID 123456789012345
Company*				ACTIVATION CODE ty67P9vZ
Country*	Select			How to de
Phone				If you on't have an account on Netbilter Argos: 1. So to Netbilter Argos (www.netbilter.net) and click on the Create an
E-mail*				 When the new account is created, follow the instructions and login to the new account. Citik on the Online guide icon ^{2/2} and follow the instructions on how to Add and activate a system.
Confirm E-mail*				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 ³² and follow the instructions on how
Device ID*	0		SYSTEM ID 123456789012345	to Add and activate a system.
Activation Code*			ACTIVATION CODE	This document should be freefed as a document of value, as it contains unique information meeded to register your divisio on Nebber Argos. If you lose this document, you will need to apply for a new Activation Code at http://support.netbatr.com
Accept the terms and conditions		register cance	əl	591468 rec. 1.00

The System ID and Activation Code are provided on the printed Netbiter Argos information sheet supplied with the Netbiter gateway.

- 4. Accept the terms and conditions, by checking the box provided.
- 5. Click the **Register** button.





6. The account is created and an e-mail containing an activation link will be sent to the e-mail address provided.



go to login

- 7. Open the e-mail from Netbiter Argos in your e-mail client and click on the activation link.
- 8. It is now possible to log in to the account. Press the **go to login** button to return to the Netbiter Argos login page.



go to login

9. Navigate to the Netbiter Argos login page at <u>https://www.netbiter.net</u> Enter the **User** and **Password** for the account and then click the **Log on** button.

User:	
Password:	
	Log on
eate an account	Lost your passwor





4. Activate the Netbiter EC250

When the account was registered, the Netbiter gateway used for the process was added to an automatically created project, called "**MyFirstProject**". This can be found under the Management tab.

1. Click on the link to "MyFirstProject".

Projects All	systems Ter	mplates Profiles All d	ashboards		
gement » Projects »	» Administration				
dministration	Add project				
	1				
wing 1 to 1 of 1	entries				
wing 1 to 1 of 1 Online	entries	Name	•	Created	\$

2. Click on the link "There are 1 pending system(s)"



3. Click on the **Activate** link, to activate the Netbiter EC250.

Showing 1 to 1 of 1 entries					
Barse	a Device (D	0 Project ~	Level 0	GPS	
MyFirstSystem	353234023061169	MyfirstProject	fres	No	 Activate Remove
Shawing 1 to 1 of 1 antrina					

4. Select **Standard** subscription from the dropdown list.

Nanagement - Eysteine - Itactive - MyFirstEystein - System activation		50 الأ
System activation		
Device ID *	353234023061169	
Activation code *		
Subscription key to use	*** Select subscription ***	add subscription key

5. Click the **activate** button to activate the Netbiter EC250 on Netbiter Argos.

If the Netbiter EC250 is connecting to a LAN network via an Ethernet cable, then the activation is complete. To connect to a mobile network, continue to the next step.

6. In the Management menu, go to Management \rightarrow MyFirstProject \rightarrow Netbiter System





7. Click on the tab for **Mobile network**.



8. Enter the **phone number** for the Netbiter SIM that was provided in the SIM card envelope.

	\frown
I have a Netbiter SIM-card	
I have a custom or standard SIM-card	0
SIM-card mobile number *	

9. Click the **Send** button at the bottom of the page. This will send a configuration SMS to the Netbiter EC250, which will process the configuration, reboot and then reconnect to Netbiter Argos. This may take a few minutes.





5. Configure the Netbiter EC250

- 1. Go to the Netbiter System via the menu Management → MyFirstProject → [System name]
- 2. Click on the **Configuration** tab.

Presentation Reports	Mem Management Acount	Contact Logout 🚵
Projects All systems	Templates Profiles 14I dashboards	Logged In: Test U Account: DemoSe
lanagement » Projects - hiy first proj	Configuration	<i>%</i>
Status Configuration	ashboards Map Backup/Firmware Mobile network Properties	
Last configuration update	2013-04-22 13:13:34	
Last synchronization	Never synchronized 😹	

3. On the Device configuration tab that appears by default, click the **Add device** button.

Internal		oottinga	Template	Actic
incornar	Virtual WS		Netbiter Internal	Edit
ETH Stats	Virtual ETH		Netbiter Ethernet Stat	Edit
GPS	Virtual GPS		Netbiter GPS	Edit
PPP Stats	Virtual PPP		Netbiter PPP Stat	Edit

 In the dialog that opens, select the radio button Use configuration from a profile, and in the dropdown list for Device profile - select Netbiter EC250 Starter Kit.

Leave the device type as **Modbus**.

5. Click the **Next** button.

	Add device
	Cancel
1/3 Set device typ	e
O Use configura	tion from a template 🥝
• Use configura	tion from a profile 🥹
Device type	Modbus 💌 🥹
Device profile *	Netbiter EC250 Starter kit 4
	5 Back next





6. In this dialog, unless you have special requirements on the Modbus settings, leave these as they are and click **Next**.

emplati
-

The final step is to synchronize the configuration, i.e. Netbiter Argos will transmit the configuration to the Netbiter EC250. Click the button Synchronize configuration.

The device will reboot and reconnect to Netbiter Argos automatically, which may take a few minutes.







5.1 Position the Netbiter EC250

- 1. Click on the Map tab.
- 2. Zoom in on the map and click with the right mouse button on the installation's location.
- 3. Click the **save** button to store the postion on the map



5.2 View the Project

Now that you have added your first field system to your first project, it can now be viewed at Netbiter Argos. Click on the **Presentation** menu to access the project containing the Netbiter EC250.







6. Support

Support is accessed from the Netbiter Support web page at <u>www.support.netbiter.com</u>.

1. Click on the **Request Support** button.



2. Fill in as much information you can about your problem.

Fields marked with a red asterisk (*) are required.

Request Support		
Request support or follow your existing support issues online Login to track your existing support issues online. If you don't have any login, fill out the form below!		
User: Password		
Login (Lost Password)		
Request support To register a support issue on Netbiter, fill out the form below. We will automatically send you login information for tracking the support issue online. You will get an email to the registered address as soon as the support issue is updated by our support team.		
First Name *	Last Name *	
Company Name *	Email Address *	
Phone *	Confirm Email Address *	
Choose your support office *	 Make sure you type in your correct email. Login information, issue updates will be sent to this 	
(choose office)	email. - If you do not receive any email check your spam filter cottings	
Product		
Version / Revision	MAC ID / IMEI / Device ID / Serial	
Title *		
Description *		
Upload File		
	Bläddra	
Receive technical support related information via email (Max 8 per year)?		
Submit		

3. Click the **Submit** button.

