

# Configuration eBus coupler Ethernet

Configuration of the Ethernet interface for TCP and UDP operation

### 1 INTRODUCTION

In order to commission or configure the eBus coupler under Windows  $\$ , the installation of the "Configuration-Tool" (hereafter called Config-Tool) is necessary.

This manual describes the installation of the "Configuration Tool" (hereafter called Config Tool) and configuration of the Ethernet interface under Windows 7<sup>®</sup>.

Execute the installation with administrator rights.

This manual is applicable for the following versions of the eBus coupler: Art. No. 12002 eBus coupler Ethernet

#### Note

Before you start assembling the device and put it into operation, read this manual carefully to the end, especially the section on safety instructions.

# 2 PREPARATION, COMPARISON eBus

After connecting the eBus coupler with the power supply and a network cable to a PC, the power LED on the top of the device lights up and signals that the device is ready for operation. For details on adjusting the eBus level, please refer to the current operating instructions for the device



#### Note

The module may only be operated at the voltages and under the ambient conditions specified for it. The operating position of the device is arbitrary.

The modules may only be commissioned by a qualified electrician.

Further information on the operating conditions can be found in the operating instructions for the under "Operating conditions".

# **3 TERMINAL PROGRAM / PROTOCOL**

The eBus coupler with Ethernet interface (Art. No. 12002) translates the running data of the eBus for different programs via TCP or UDP data transfer.

As test program e.g. the program "Hercules" or Putty may be used.

 Hercules:
 http://www.hw-group.com/products/hercules/index\_en.html

 Putty:
 http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html

# 4 SOFTWARE DOWNLOAD

Copy the downloaded zip file to any directory. Unzip the zip file e.g. with the free software 7-Zip (http://www.7-zip.de/)

# 5 WINDOWS PORT RELEASE

For the communication between eBus coupler and your Windows control software, e.g. IP-Symcon, Putty or Hercules, a release of the selected port of the Config-Tool under Windows is necessary.

Unfortunately, it is not enough to disable the firewall, but you must explicitly enable the ports for sending and receiving via TCP and/or UDP in Windows.

You can find the activation under WINDOWS:

Control Panel / System and Security / Windows Firewall / Advanced Settings

=> Incoming rules

=> Outgoing rules



# 6 Start "ESERA CONFIG TOOL 1"

Connect the eBus coupler Ethernet to your IP network and a suitable power supply (9-30VDC min. 0.5A) and switch it on. The green LEDs on the front panel (PWR) and inside the network socket should light up.

#### Start the "ESERA CONFIG TOOL 1".

- Click on the button "Search" to search the eBus coupler in the Ethernet network.
- Another search field opens. Click on the "Search" button. The search may take a few seconds. It is not necessary to enter anything in the search mask here.

Controller - Network Config Tool 1.4.4.1	_	$\times$
Save Setting 🖓 Reset Interface 🛞 Ping 🔞 Exit		
Controller Ethernet		
Search Device network settings		
Search method     UDP broadcast / Search all device		
TCP unicast     TCP unicast     Broadcast will find the all Controller / Gateway in     the same subnet.		
Search Close		
<ul> <li>TCP mixed</li> </ul>		
TCP client     Remote IP/host name:	:	
🖏 ESERA Config Tool 1 🧭 None device selected		.::

# 7 SETTINGS TCP SERVER

You may assign an IP address to the eBus coupler Ethernet via DHCP server or set it to a fixed IP address. **We recommend the operation with a fixed IP address.** 

### Settings

If you set the IP address to fixed, the settings for gateway and DNS server are also fixed. to be entered. The module must be operated in the same subnet as your computer. Select TCP Server

#### Settings (example)

- Fixed IP address 192.168.2.20
- Subnet Mask 255.255.255.0
- Gateway: 192.168.2.1
- DNS Server: 0.0.0.0
- 1: MAC address of the eBus coupler,
- 2: IP address, subnet mask and gateway and port, e.g. 5000
- 3: Operating mode: TCP server

🖏 Controller - Network Config Tool 1.4.4.1	_		×
🥘 Search Device 🔌 Save Setting 💫 Reset Interface 🛞 Ping 🔞 Exit			
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Ontroller Ethemet     Ontroller Ethemet			
- Device network settings			
Status: OPEN O Using the follow IP Address O DHC	P		
2 Device IP address: 192.168.2.20	:	5000	
Subnet mask: 255.255.255.0			
Gateway: 192.168.2.1			
DNS server: 192.168.2.1			
			J
- Select operation mode for the device			
3			
TCP server			
TCP mixed			
O TCP client Remote IP/host name:			
192.168.11.3		5000	
🖏 Find: 1 devices 🥝 00:08:DC:60:AE:38			

#### Saving the settings

Save the settings via the "Save Setting" button. This completes the configuration of the interface

### Note:

Clicking the "Factory" button restores the factory settings of the Ethernet interface, but not the settings of the delivery state.



### 8 SETTINGS UDP SERVER

You may assign an IP address to the eBus coupler Ethernet via DHCP server or set it to a fixed IP address. We recommend the operation with a fixed IP address.

#### Settings

If you set to fixed IP address, the gateway and DNS server settings are also to be entered. The module must be operated in the same subnet as your computer Select UDP server.

Settings

- Fixed IP address 192.168.2.20
- Subnet Mask 255.255.255.0
- Gateway:
- DNS server: 192.168.2.1
- 1: MAC address of the 1-Wire controller 1
- **2:** IP address, subnet mask and gateway and port: e.g. 5000

192.168.2.1

3: Operating mode: UDP server, IP address and port of the control system. To be able to establish a data connection with the control system, the entry of the IP address and the port is necessary.

🍓 Controller - Network Config Tool 1.4.4.1	_		$\times$
🥘 Search Device 🔌 Save Setting 💫 Reset Interface 🛞 Ping 🔞 Exit			
esera automation			
00:08:DC:60:AE:38     Device network settings			
EW Interface: 1.3.     Status: OPEN     OPE			
2 Device IP address: 192.168.2.20	:	5000	
Subnet mask: 255.255.255.0			
Gateway: 192.168.2.1			
DNS server: 192.168.2.1			
- Select operation mode for the device			
O UDP			
TCP server			
			_
Remote IP/host name:		5000	
192.168.11.3		5000	
🖏 Find: 1 devices 🧭 00:08:DC:60:AE:38			:

#### Saving the settings

Save the settings via the "Save Setting" button. This completes the configuration of the module

# 9 OPERATING CONDITIONS

The module may only be operated at the voltages and under the ambient conditions specified for it. The operating position of the device is arbitrary. The device is intended for use in dry and dust-free rooms. Do not operate the module in an environment where flammable gases, vapors or dusts are or could be present. If condensation forms, wait for an acclimatization period of at least 2 hours.

The modules may only be commissioned by a qualified electrician.

# 10 ASSEMBLY

The mounting location must be protected from moisture. The device may only be used in dry indoor areas. The device is intended for mounting inside a control cabinet as a stationary device.

### 11 DISPOSAL NOTICE

Do not dispose of the device in household waste! Electronic devices are to be disposed of according to

of the Directive on Waste Electrical and Electronic Equipment on the local Collection points for electronic waste to dispose of!



### 12 SAFETY INSTRUCTIONS

When handling products that come into contact with electrical voltage, the applicable VDE regulations must be observed, in particular VDE 0100, VDE 0550/0551, VDE 0700, VDE 0711 and VDE 0860.

- All termination and wiring work may only be carried out when the device is de-energized.
- Before opening a device, always disconnect the power plug or ensure that the device is de-energized.
- Components, assemblies or devices may only be put into operation if they have previously been installed in a housing in such a way that they are safe to touch. They must be de-energized during installation.
- Tools may only be used on devices, components or assemblies if it has been ensured that the devices are
  disconnected from the supply voltage and that electrical charges stored in the components located in the device
  have been discharged beforehand.
- Live cables or lines to which the device, component or assembly is connected must always be inspected for insulation faults or breaks.
- If a fault is detected in the supply line, the device must be taken out of operation immediately until the defective line has been replaced.
- When using components or assemblies, attention must always be drawn to strict compliance with the characteristic data for electrical variables specified in the associated description.
- If it is not clear for the non-commercial end user from an existing description which electrical characteristic values apply to a component or an assembly, how external wiring is to be carried out or which external components or additional devices may be connected and which connection values these external components may have, a qualified electrician must be consulted.
- Before commissioning a device, it must generally be checked whether this device or the assembly is fundamentally suitable for the application for which it is to be used.
- In case of doubt, it is essential to consult specialists, experts or the manufacturer of the assemblies used.
- We do not accept any liability for operating and connection errors that are beyond our control.
- Kits should be returned with a precise description of the fault and the associated assembly instructions without the housing in the event of malfunction. Without error description a repair is not possible. We have to charge extra for time-consuming assembly or disassembly of housings.
- It is essential that the relevant VDE regulations are observed during installations and when handling parts that will later carry mains voltage.
- Devices that are operated at a voltage greater than 35 VDC/12mA may only be connected and commissioned by qualified electricians.
- Commissioning may only be carried out if the circuit is installed in a housing so that it is safe to touch.
- If measurements are unavoidable with the housing open, a safety isolating transformer must be connected upstream for safety reasons, or a suitable power supply unit must be used.
- After installation, the required test must be performed in accordance with DGUV Regulation 3.



### 13 WARRANTY

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