**Quickstart-guide
BNC2 - BACnet Gateway**

**Extension for the
SNMP / WEB / MODBUS
Manager
CS121/CS141**

Installation of the gateway and configuration of CS121/CS141

Configuration of the CS121 / CS141

Connect the SNMP / WEB / MODBUS Manager or BACS Webmanager with the monitored system. Configure via WEB interface all the necessary parameters, such as the network settings, the device connected to COM 1 UPS model, etc. All information required for this purpose, see the user manual of the CS121 / CS141. **Please make sure that at least the firmware FW is used 5:29 or 5:30.**

Connect CS121 / CS141 to the network and have the SNMP adapter to a fixed IP address. Also, make sure that the option "Modbus over IP" is activated.

NOTE: It is not possible that an IP address is assigned by the DHCP server. The IP address of the SNMP adapter must be taken in configuring the BNC2 and cannot be adjusted dynamically

The following settings must be checked or adapted for the BACnet link:

CS121:
- Menu "Network & Security":
- Enable Modbus over IP: Enable
- Modbus Slave Address:
- After all the settings have been made, they must be saved by clicking on "Save Configuration"
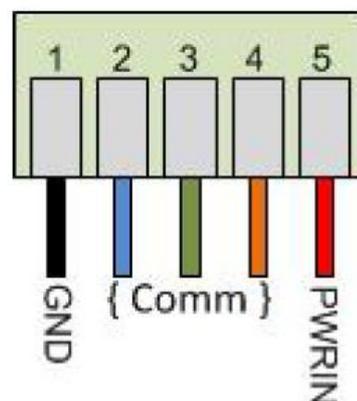- Restart the CS121.

CS141:
- Modbus/IP is enabled by default. No further actions are required

Powering the Gateway

The following steps will allow you to properly and safely power the gateway.

Warning improper wiring will cause unit failure Use the Barrel Connector OR the Screw Terminals power connection, NOT both
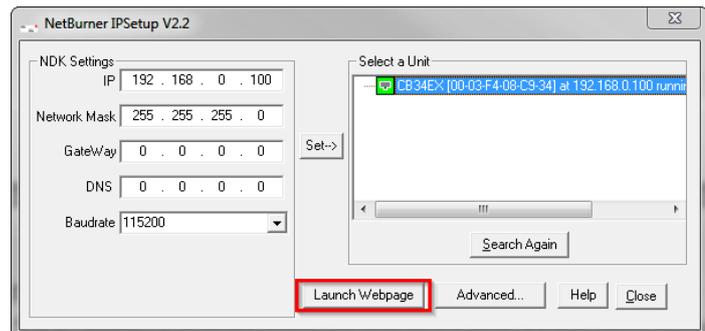
- Connect a 24VDC power source to the gateway.

- The unit draws 125 mA at 24VDC

- The gateway has a voltage operating range from 8-30VDC, 24VDC is recommended.

Configuration of the BNC2:

Initial setup of the gateway

- Make sure you are in the correct subnet. The default setting are:
- Default IP address: 192.168.0.100.
- Default Subnet. 255.255.255.0.
- Connect the Gateway using the supplied crossover cable to the PC
- Insert the supplied CD-ROM.
- Start the program IPSETUP.EXE. If the connection was successful, the gateway should be detected and displayed in the window.

- Please click on the „Launch Webpage"- Button. You should get the following screen:
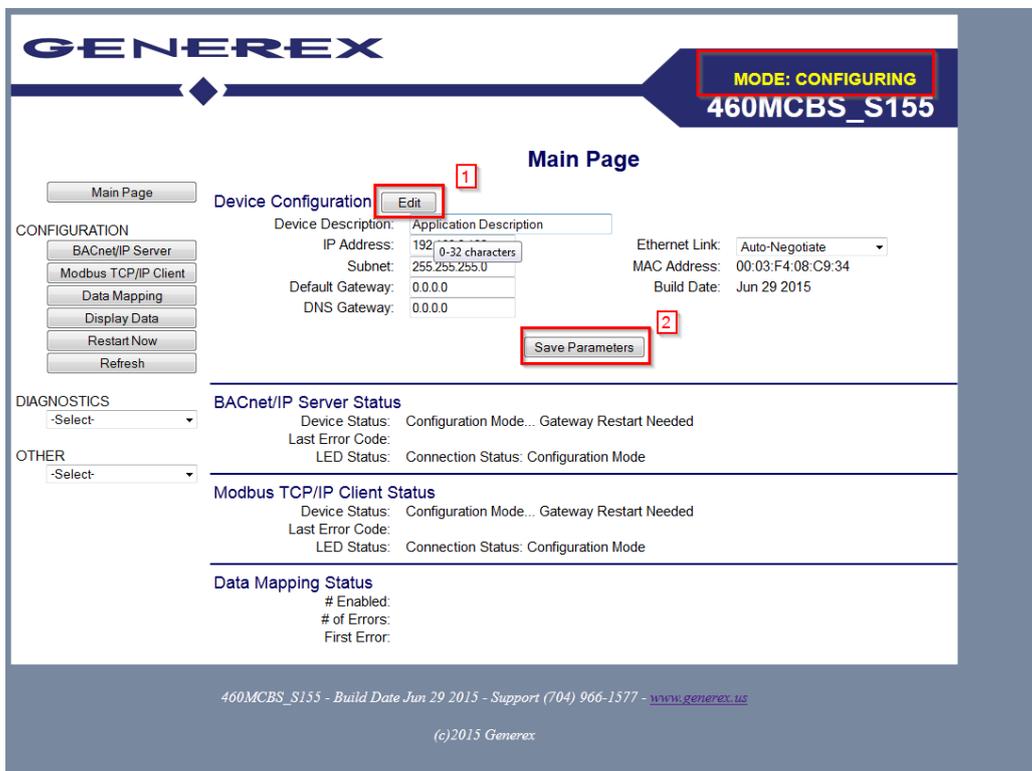
Configuration of the IP-Address

- • Switch to the "Configuration Mode" and confirm, then the two notes with OK

- Ensure that you are in Configuration Mode. The current operating mode is displayed at the top right
- To change the IP address, select "Edit" (1). It is now possible to enter the data. Click to Abschißen the operation on "Save Parameters" (2)

- Then, restart the gateway by clicking the button "Restart"

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Configuration of the Modbus TCP/IP Client

- If you are not already in the configuration mode, switch into it by pressing the button "Configuration Mode" there.
- Click the left button on the Modbus TCP / IP Client
- Please ask first at the top of the following values:
- Delay Between Messages: 10ms
- Response Timeout: 20000ms
- Delay Between Attempts Connect: 1000ms
- Dependency Protocol: None
- Close the entry by clicking "Save Parameters" button.

Modbus TCP/IP Client Configuration   [Help]

Delay Between Messages:	10	10-60000 ms
Response Timeout:	20000	50-60000 ms
Delay Between Connect Attempts:	1000	1000-60000 ms
Dependency Protocol:	None ▼	

[Save Parameters]

I

IP Address is not in the Subnet range. Change IP Address or configure a Default Gateway

☑ Enable	**Modbus TCP/IP Server 1**	Copy From Modbus TCP/IP 1 ▼ [Go]
Device Label MC01		IP Address 192.168.222.91
	TCP Port 502	1-65535 (Default: 502)
Force Function Code 15/16 for Single Writes ☐		Enable 0-Base Addressing ☑
Bit Pack 1 Bit ▼ Coil / Input Status Only		Swap Indicator None ▼
# of Read Scan Lines 679 0-800		# of Write Scan Lines 0 0-100
	Generate Scan Lines	

[View Read Scan Lines]   [View Write Scan Lines]

- Set in the "IP Address", the IP address of the CS121 / CS141 a. In this example it is the 192.168.222.91.
- The TCP Port 502 (default).
- Make sure that the checkbox "Enable 0-Base Addressing" is activated safely.
- Should not the CS121 are the default subnet and you are connected via the default IP is an error message, which can ignore
- Please scroll down and close the input by clicking Save Parameters from.

Configuration of the BACnet IP Server
- Please adjust these settings according to the specifications of the BACnet infrastructure.
- If the BACnet / IP client in a Andren subnet there is the possibility the BACnet IP Server in the other subnet involve:
- Foreign Device Registration (recommended). As time To_Live time time specifies how often data should have been sent to the client.
- Static Device Binding: Only if supported by the client).

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BACnet/IP Server Configuration

Help

Device Label: BS01

UDP Port: 47808   1-65535 (Recommend 47808-47823)

Instance: 50   0-4194302

Inactivity Timeout: 3000   0-Disable; 1000-65000 ms

Name: Gateway Name

Description: Gateway Description

Location: Gateway Location

Bit Pack: 1 Bit ▾   Binary Input / Output Only

Save Parameters

Restart after the configuration

- Click on the configuration on the button "Restart Now"
- After about 10 seconds the gateway should be restarted. Press F5 to refresh the website
- The gateway is then in "Running mode"

Backing up and restoring a configuration

Backing up a configuration

- First, select the drop down menu "Other" and then "Export / Import Config" from. [1]
- In order to save the configuration, click on the button "Save Configuration to File" [2]. The file will then be downloaded via the Download Manager of the browser as * .rtax file. This may take some time to complete, depending on the size of the configuration.

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Restoring a Configuration

- First switch to the configuration mode [1]
- From the drop-down menu "Other" and then "Export / Import Config". Choose [2]
- Select the file that contains the desired configuration. [3]
- Load the configuration by clicking the button "Load Configuration" [4] high. This process can also take some time Anpruch. The progress bar of the browser in this case indicates the current status. When the upload is complete, restart the gateway by clicking on the button "Restart now". The desired configuration is after the restart.