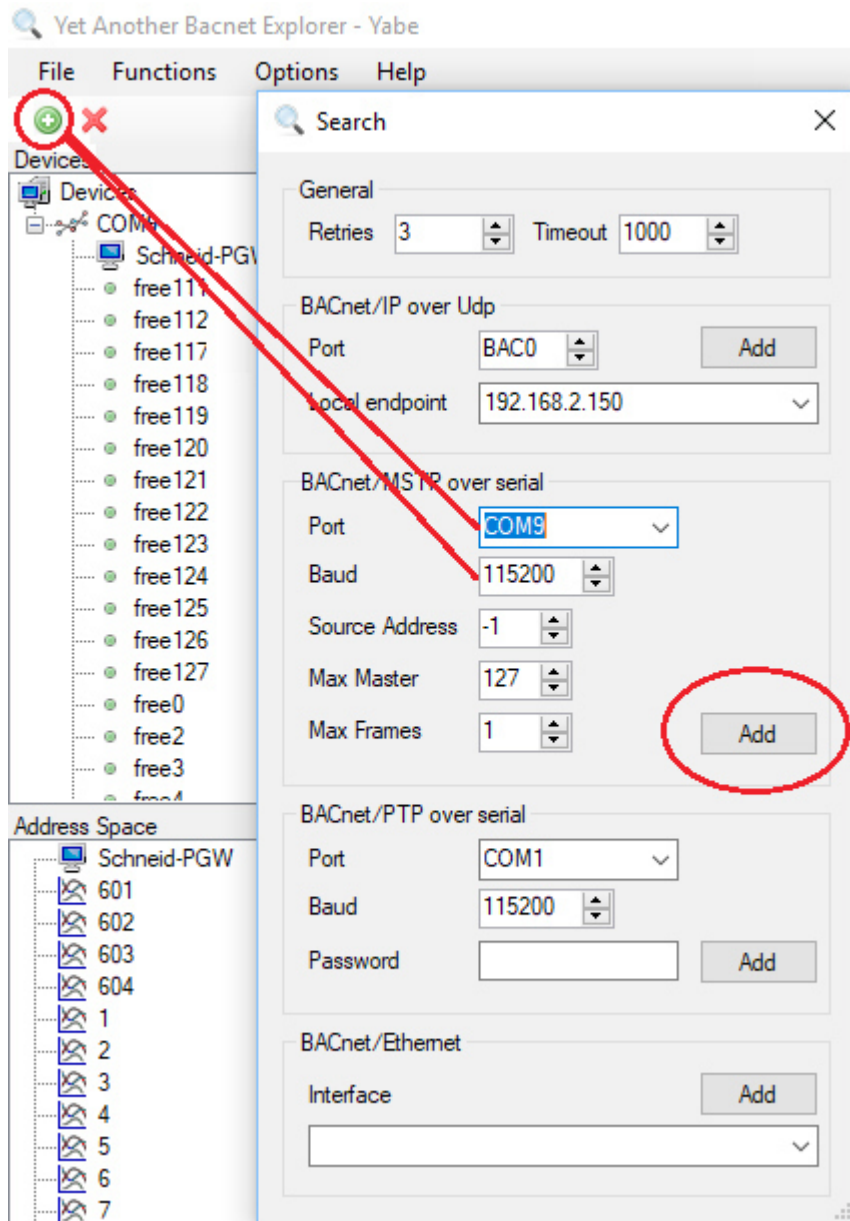


# Plug-in card module CM08-PGW

## Configuration:

Yabe Bacnet Explorer

<https://sourceforge.net/projects/yetanotherbacnetexplorer/>



The module must appear by itself.  
Confirm the first dialog with OK.

All data records that are available for each device can be displayed with "Subscribe".  
Only those that are current appear in the list.

# Plug-in card module CM08-PGW

The screenshot shows the 'Yet Another Bacnet Explorer' interface. On the left, the 'Devices' tree shows a hierarchy: 'COM9' containing 'Schneid-PGW [8054]' and various 'free' objects. Below it, the 'Address Space' tree shows 'Schneid-PGW' with objects 601-604, 1-12, and '617 Pumpe HK0'. A blue arrow points from 'Schneid-PGW [8054]' in the Devices tree to the table. A red arrow points from the 'Subscribe' context menu option (highlighted over object 2) to the table. The table, titled 'Subscriptions, Periodic Polling, Events/Alarms', contains the following data:

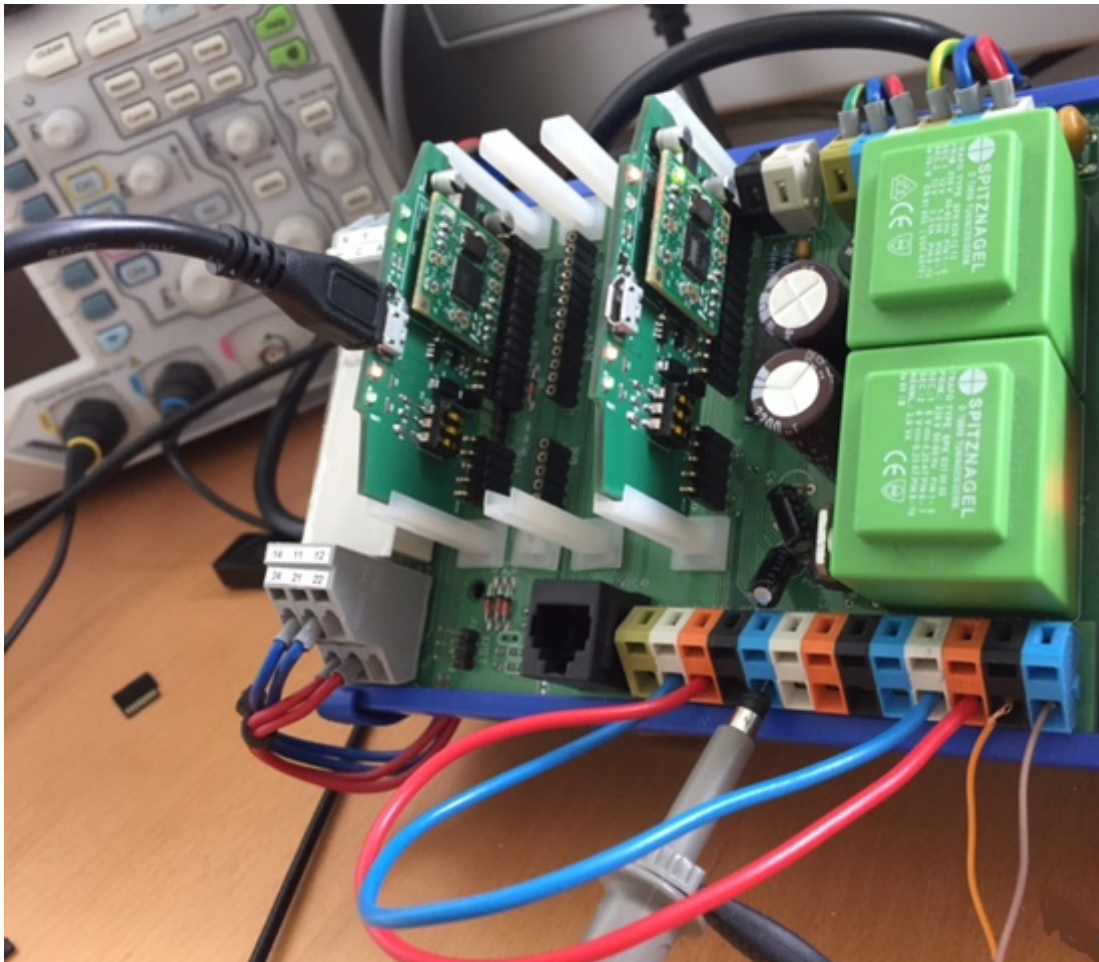
Device	ObjectId	Name	Value	Time	Status
1 - 8054	OBJECT_ANALOG_INPUT:601	601	0,8	15:28:44	OK
1 - 8054	OBJECT_ANALOG_INPUT:602	602	43	15:28:45	OK
1 - 8054	OBJECT_ANALOG_INPUT:603	603	48	15:28:40	OK
1 - 8054	OBJECT_ANALOG_INPUT:604	604	68,2	15:28:45	OK
1 - 8054	OBJECT_ANALOG_VALUE:1	1	2	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:2	2	2	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:3	3	1	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:4	4	1	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:5	5	1	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:6	6	0	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:7	7	0	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:8	8	0	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:9	9	0	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:10	10	2	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:11	11	2	15:28:22	OK
1 - 8054	OBJECT_ANALOG_VALUE:12	12	0	15:28:22	OK
1 - 8054	OBJECT_BINARY_OUTPUT:617	617 Pumpe HK0	0	15:28:22	OK

In the address space; where the objects appear; parameters (Present Value) can also be written back to the controller.

## ***Plug-in card module CM08-PGW***

### **Settings in the ICC studio:**

Experiment setup with 2 PGWs (COM-A and COM-C) on the MR08 controller  
Baud rate 19200 addr. 1 (A + C)



- The settings are made offline with the ICC Studio.
- **! Important !** always save before downloading.
- If the module is connected via USB and in the online program, the settings are saved on the PC with upload and must be edited offline.
  
- Any number of modules can be described with download.
- In "Network - BACNET - NODE" the MAC address may only appear once (0-127).
- Max. 240 BACNET objects are assigned, the rest are transferred as Default BACNET mapping, so can only be displayed by the remote site if the instance ID is known (data point list).
- Objects that are entered in the list can be found by broadcast (including designation / unit / and multiplier).

# Plug-in card module CM08-PGW

Example AT from the MR08 controller on the BACNET side:

Ar	Available Items
Analog Value - 6	Object Name: 601 Aussenfühler
Analog Value - 7	Instance: 601
Analog Value - 8	Database Address: 1200
Analog Value - 9	Data Type: 16-Bit Signed
Analog Value - 10	Multiplier: 0.1
Analog Value - 11	Units: No Units
Analog Value - 12	Unit Value:
Analog Input - 601 Aussenfühler	Default COV Increment: 0
Analog Input - 602	
Analog Input - 603	

- Object Name: Must be unique in the node, can be text, or just numbers.
- Instance: Must be unique in the node, is practically a data point ID.
- Database address: The reference where the value is stored in the module (host setting).
- Data Type: 2-byte signed as specified via Modbus (tool data has 32-bit 4-byte, for example).
- Multiplier: 0.1 will be transmit on the Modbus for twelve and a half degrees 125.
- Unit: unit in this case Celsius.
- Default COV Increment: Specifies the change in the value at which it should be resent, 0 means with each change, 10 would mean that the change should only be resent when there is a 1K change.

Example host side: MR08 actual values from data point 601

Project	Input Register Service Object - VAL700 Settings
Binary Output - 627	Description: VAL700
Default BACnet Mapping	Destination Address: 1
<ul style="list-style-type: none"> <li>Host           <ul style="list-style-type: none"> <li>Modbus RTU Master               <ul style="list-style-type: none"> <li><b>Input Register Service Object - VAL700</b></li> <li>Holding Register Service Object - Par100</li> <li>Holding Register Service Object - Par200</li> <li>Holding Register Service Object - Par300</li> <li>Holding Register Service Object - Par400</li> <li>Holding Register Service Object - Par500</li> <li>Holding Register Service Object - Par600</li> <li>Input Register Service Object - VAL800</li> <li>Input Register Service Object - VAL900</li> </ul> </li> </ul> </li> <li>I/O</li> </ul>	Start Register: 601
	Number of Registers: 100
	Database Address: 1200
	Multiplier: 1
	Read Function: 4 (Read Input Registers)
	Data Type: 16-Bit Unsigned
	32-Bit Options
	32-Bit Registers: <input type="checkbox"/>
	Floating Point: <input type="checkbox"/>
	Big Endian: <input type="checkbox"/>
	Word-Size Register: <input checked="" type="checkbox"/>

Holding registers can also be sent back from the BACNET site.

**! Important !** Write Function 6 (since a multiset on the controller is not possible).

# Plug-in card module CM08-PGW

Example MR08 actual values and parameters via Modbus:

The screenshot shows a software interface with three main panes. The left pane shows a tree view of objects, with 'Holding Register Service Object - Par100' selected. The middle pane shows the 'Diagnostics Object' settings. The right pane shows the 'Holding Register Service Object - Par100 settings' with various parameters like Description, Destination Address, Start Register, Number of Registers, Database Address, Multiplier, Read Function, and Write Function.

Object Type	Description	Destination Address	Start Register	Number of Registers	Start Coil	Number of Coils	Start Input	Number of Inputs	Database Address	Multiplier	Read Function
Input Register Service Object	VAL700	1	601	100	N/A	N/A	N/A	N/A	1200	1	4 (Read Input Registers)
Holding Register Service Object	Par100	1	1	100	N/A	N/A	N/A	N/A	0	1	3 (Read Holding Registers)
Holding Register Service Object	Par200	1	101	100	N/A	N/A	N/A	N/A	200	1	3 (Read Holding Registers)
Holding Register Service Object	Par300	1	201	100	N/A	N/A	N/A	N/A	400	1	3 (Read Holding Registers)
Holding Register Service Object	Par400	1	301	100	N/A	N/A	N/A	N/A	600	1	3 (Read Holding Registers)
Holding Register Service Object	Par500	1	401	100	N/A	N/A	N/A	N/A	800	1	3 (Read Holding Registers)
Holding Register Service Object	Par600	1	501	100	N/A	N/A	N/A	N/A	1000	1	3 (Read Holding Registers)
Input Register Service Object	VAL800	1	701	100	N/A	N/A	N/A	N/A	1400	1	4 (Read Input Registers)
Input Register Service Object	VAL900	1	701	100	N/A	N/A	N/A	N/A	1600	1	4 (Read Input Registers)

Settings included in MR08\_Modbus\_Bacnet.icsproj.

## !Important!

Deactivate or delete all I / O settings, otherwise database registers will be overwritten.

## !Important!

The following settings must match in DeviceConfiguration -> PicoPort.

The screenshot shows the 'PicoPort - CM08-PGW2 Settings' window. The left pane shows the 'Device Configurations' tree with 'PicoPort - CM08-PGW2' selected. The right pane shows the settings for this device, including Description, Product ID, Database Endianness, Default Network Protocol, Auto Run, Configuration Locking, Status LED, and Port. The 'Database Endianness' is set to 'Little Endian', 'Default Network Protocol' is set to 'Automatic', and 'Auto Run' is checked.

- Database Little Endian
- Default Network on Automatic
- AutoRUN activ!

# Plug-in card module CM08-PGW

To check whether the values arrive at the Modbus, the database can be displayed via USB:

The screenshot shows the PicoPort software interface. On the left, a tree view shows 'Online Devices' with 'PicoPort - CM08-PGW2' selected. Below it are 'Internal Parameters' and 'Network Configuration Parameters' with sub-items like 'Read-Only Parameter - Product ID', 'Read-Only Parameter - Firmware Version', 'Read-Only Parameter - Status Code', and 'Read-Write Parameter - Run\_Mode'. On the right, there are configuration fields for 'Configuration Locking' (Enable Lock, User Name, Password), 'Status LED' (Status LED Control, Port), and 'Database Address'. The main area displays a 'Database' table with columns for 'Address' and values at intervals of 2. The table is set to 'Values' view, 'Decimal' radix, and '16-Bit Signed' data type.

Address	0	2	4	6	8	10	12	14
0	2	2	1	1	1	0	0	0
16	0	2	2	0	0	0	80	150
32	15	101	50	101	2	0	0	0
48	0	10	30	1	25	-5	0	20
64	40	1	5	3	5	-5	15	30
80	70	100	60	50	99	15	3	1
96	120	0	3	99	5	1	10	50
112	30	101	0	5	0	0	1	100
128	0	8	0	0	80	96	0	0
144	1	1	1	7	0	1	7	0
160	55	45	99	65	65	0	3	0

- The values can also be changed by clicking (they are also sent to the controller).
- If the controller no longer delivers data, values can also be written in and it is updated on the BACNET.

## Scope of delivery:

SCHNEID plug-in card module CM08-PGW

## Technical specifications:

Intrastat Number:	8537.10.91.90
Country of origin	EU/AT
Height, width, depth (in mm)	37x65x8
Weight (in kg)	0,012
Degree of protection	IP-00
Ambient temperature	0°C....+40°C
Operating voltage	5VDC
Power consumption	75mA
Max baud rate	115200 Bit/s
Connection type	Pin headers for base module
Mounting type	Plug-in card module
Operating time	Continuous operation
Degree of pollution	2