

CALEC® ST III N2Open



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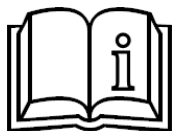
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1 General information

Content

In this operating manual are only N2Open specific information on CALEC® ST III, for more details, the technical documentation of CALEC® ST III is necessary.

REFERENCE!



You will find **further documentation** on our websites.

International clients: <https://integra-metering.com/product/calec-st-iii-standard-smart/>
German clients: <https://aquametro.de/product/calec-st-iii-standard-smart/>
Swiss clients (DE): <https://aquametro.com/product/calec-st-iii-standard-smart/>
Swiss clients (FR): <https://aquametro.com/fr/product/calec-st-iii-standard-smart/>

For general information regarding N2Open, please contact System Integration Services centres of Johnson Controls.

CALEC® ST III: Overview of supported functions

Function	Parameter	Description	More information
Addressing range	Slave: 1-255	Factory setting: 1	See chapter: Configuration of the METASYS N2Open interface on CALEC® ST III
Baud rate	9600	Factory Setting: 9600	

2 Commissioning

Commissioning of CALEC® ST III with the N2Open interface

After connecting the cable to terminals A11 (+) and B11 (-) on module #1 or A21 (+) and B21 (-) on module #2, the following configuration steps can be performed.

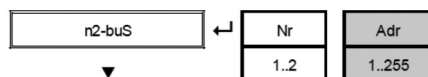
Configuration of the METASYS N2Open interface on CALEC® ST III

For using the CALEC® ST III with a N2Open interface, please set the necessary N2Open address in the CALEC® ST III operating menu. The address range is valid from 1 to 255.

The Parameter

- Bus address

is changeable in the menu structure under:



The relevant bus number for the configuration results from the assembly of the BACnet interface in socket # 1 or socket # 2.

3 Point Mapping Tables

CALEC® ST III Unit Analogue Inputs

NPT ¹	NPA ²	Unit / Note	Description
AI	1		Not used
	2	m ³	Volume
	3		Not used
	4	kWh	Energy
	5		Not used
	6		Not used
	7		Not used
	8	m ³	Volume - BDE
	9		Not used
	10	kWh	Energy - BDE
	11		Not used
	12		Not used
	13		Not used
	14	1	Auxiliary counter 2
	15		Not used
	16		Not used
	17		Not used
	18	1	Auxiliary counter 3
	19		Not used
	20		Not used
	21	kW	Power
	22	m ³ /h	Volume flow
	23	°C	Temperature Warm
	24	°C	Temperature Cold
	25	K	Temperature difference
	26		Not used
	27		Not used
	28		Not used
	29		Not used
	30	t	Mass
	31	t/h	Mass flow
	32	1	Auxiliary counter 1
	33		Not used
	34		Not used
	35		Not used
	36		Not used
	37		Not used
	38		Not used
	39		Not used
	40		Firmware Version
	41		Hardware Version

¹ Network Point Type

² Network Point Address

CALEC® ST III Unit Analogue Inputs

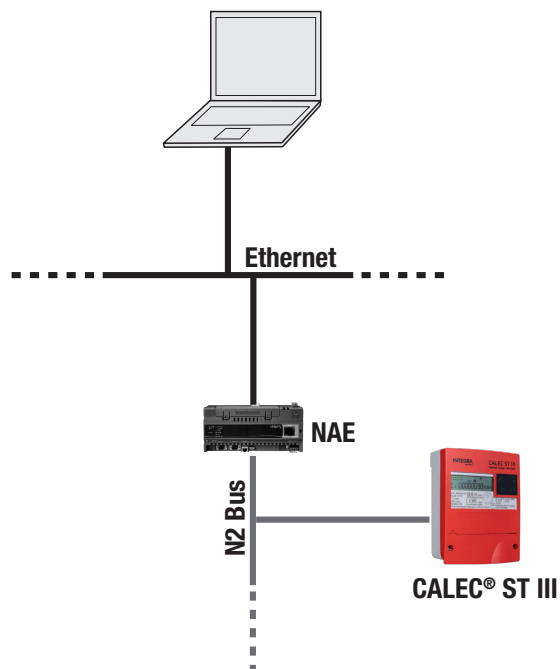
NPT ¹	NPA ²	Unit / Note	Description 1=On 0=Off
BI	1		Device Alarm Status
	2		Not used
	3		Not used
	4		Not used
	5		Not used
	6		Not used
	7		Installation side [1 = Cold side, 0 = Warm side]
	8		Not used
	9		Not used
	10		Device Error Status

¹ Network Point Type

² Network Point Address

4 Application details

N2Open protocol is a well established field bus protocol which is used in the area of building automation of Johnson Controls. N2Open (based on RS 485 technology) allows the Aquametro heat calculator CALEC® ST III to be easily integrated into BMS and other system components of Johnson Controls.



Components requirements

To integrate a CALEC® ST III device of Aquametro into a N2Open network, follow components are necessary:

- CALEC® ST III with METASYS N2Open interface
- For information of Johnson Controls devices please contact Johnson Controls directly.

Line termination

A termination resistor must be connected to each end of the RS-485 segment. The specification recommends a 120 Ohm resistor.

If the CALEC® ST III is at the end of a segment, the internal termination resistor can be used.

Operating menu: Bus => n2Bus => TRN

5 Troubleshooting

No communication

If no communication via N2Open possible, please check the following possibilities:

- Are the connections to clamp A11 (+) and B11 (-) on module #1 or A21 (+) and B21 (-) on module #2 O.K.?
- Is the N2Open setup at CALEC® ST III (Address) O.K.?
- Please check the address of all N2Open slaves in the network.