

Quick Start Guide

AcowaZoo

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ACOWA
INSTRUMENTS

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AcowaZoo - Devices

AcowaZoo application provides a user interface tool for working with devices:

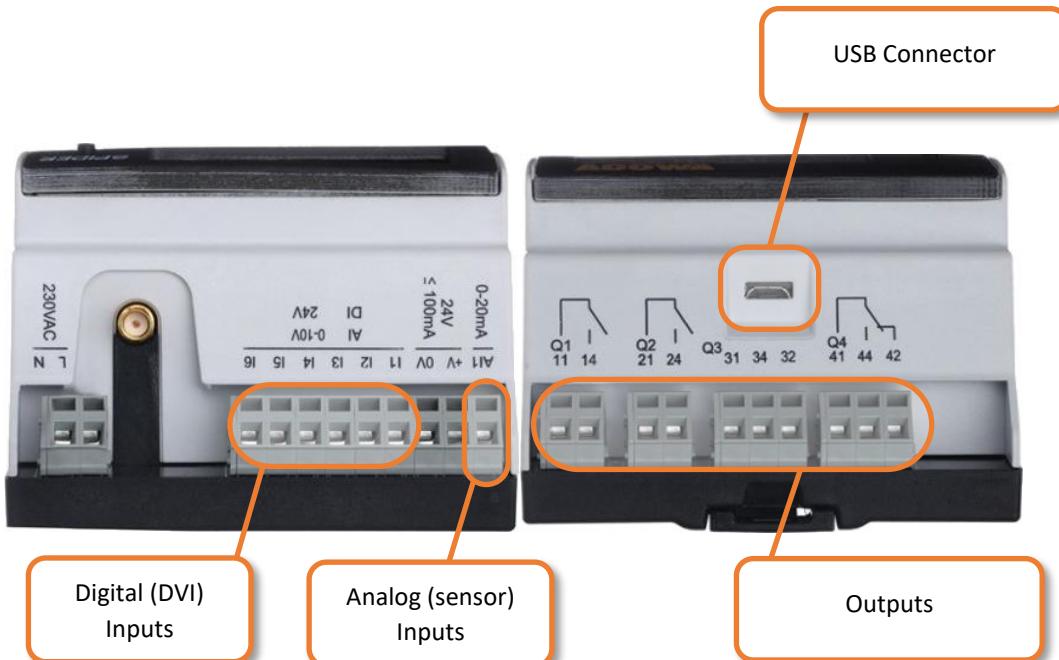
- SPIDER (universal pump controller);
 - GEKKO (data logger);
 - PUMA (universal single pump controller);

SPIDER



Overview





Connecting to PC - USB

A SPIDER connects to a PC using a Micro-USB connector cable. The AcowaZoo tool application auto-detects the SPIDER and establish a connection.

Connecting via TCP

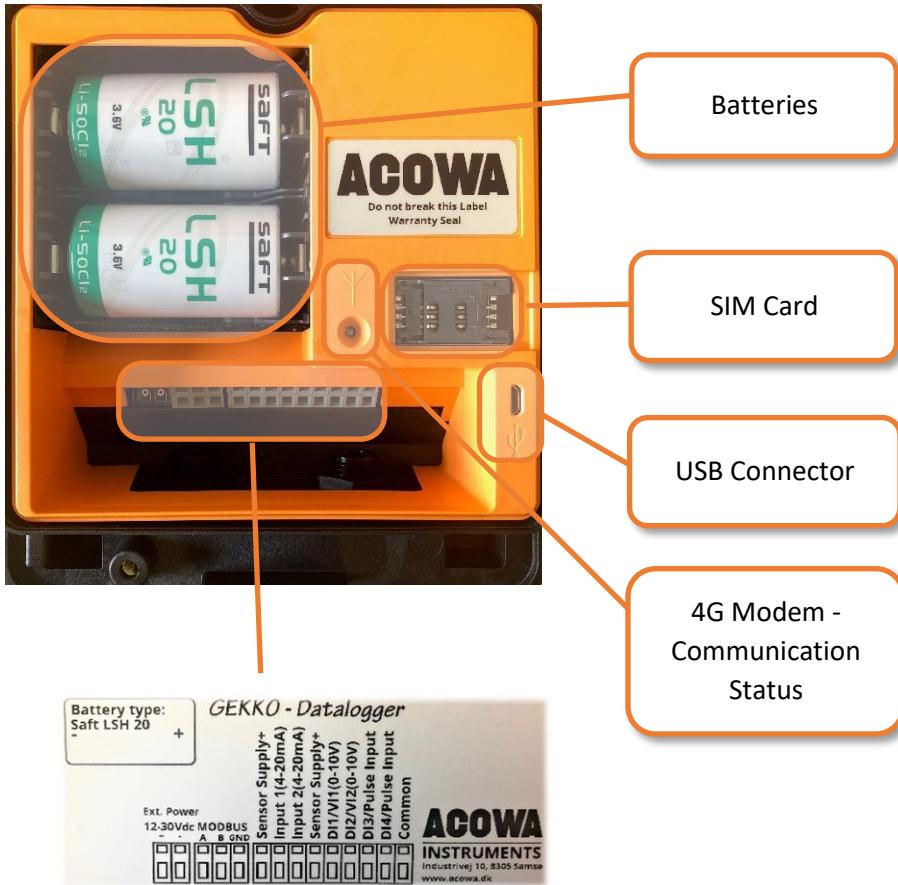
To connect a SPIDER using TCP IP, the SPIDER needs to be configured with the correct TCP settings (IP address and port). These settings are set using the USB interface to AcowaZoo tool. When TCP-settings in the SPIDER is correctly configured a TCP connection can be established.

GEKKO



Overview





Connecting to PC - USB

A GEKKO connects to a PC using a Micro-USB connector cable. The AcowaZoo tool application autodetects the GEKKO and establish a connection.

Connecting via TCP

To connect a GEKKO using TCP IP the GEKKO needs to be configured with the correct TCP settings (IP address and port). These settings are set using the USB interface to AcowaZoo tool When TCP-settings in the GEKKO is correctly configured a TCP connection can be established.

Connecting via AcowaCore

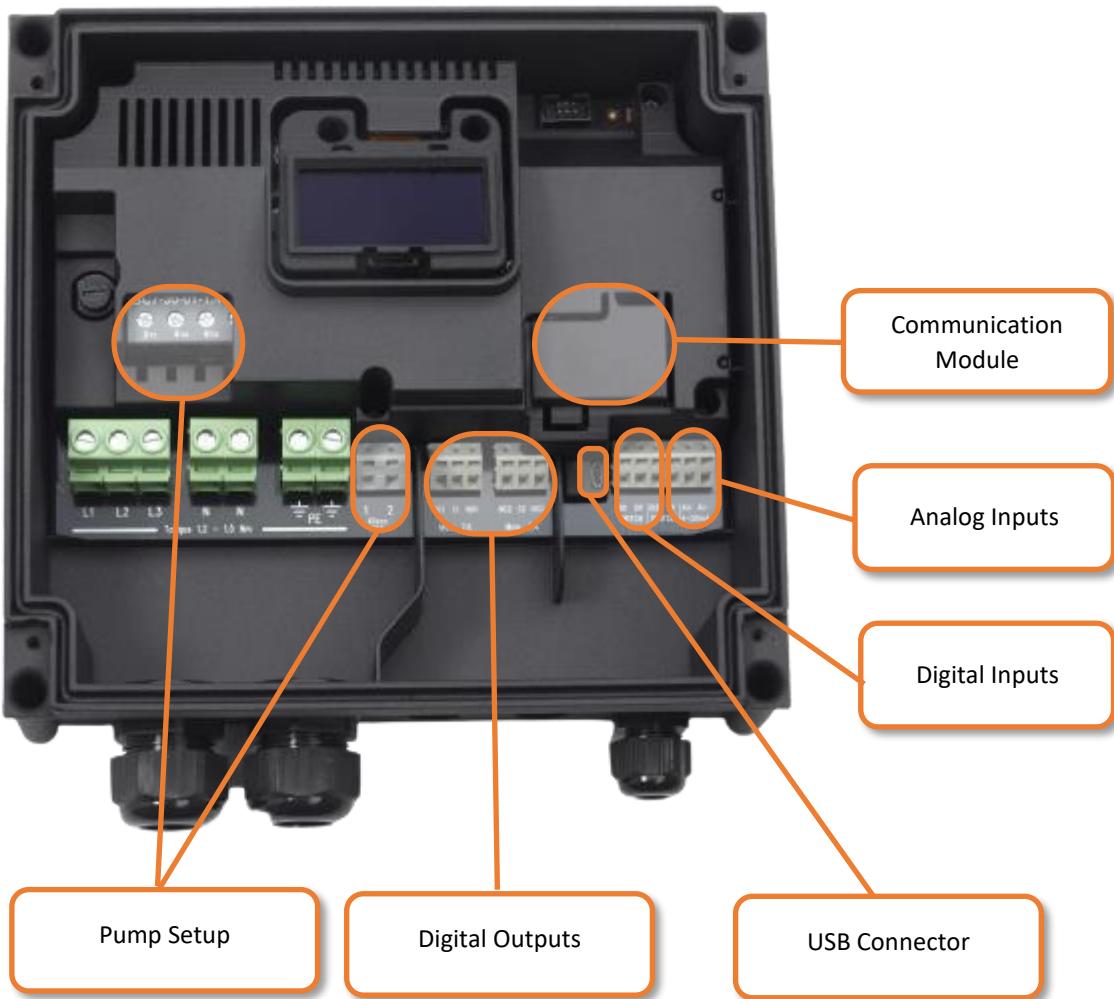
AcowaZoo supports communication to GEKKO data loggers via AcowaCore software. This means that it is now possible to write setpoint changes to your devices locally via the server, without having to physically go to the individual devices.

PUMA



Overview





Connecting to PC - USB

A PUMA connects to a PC using a Micro-USB connector cable. The AcowaZoo tool application auto-detects the PUMA and establish a connection.

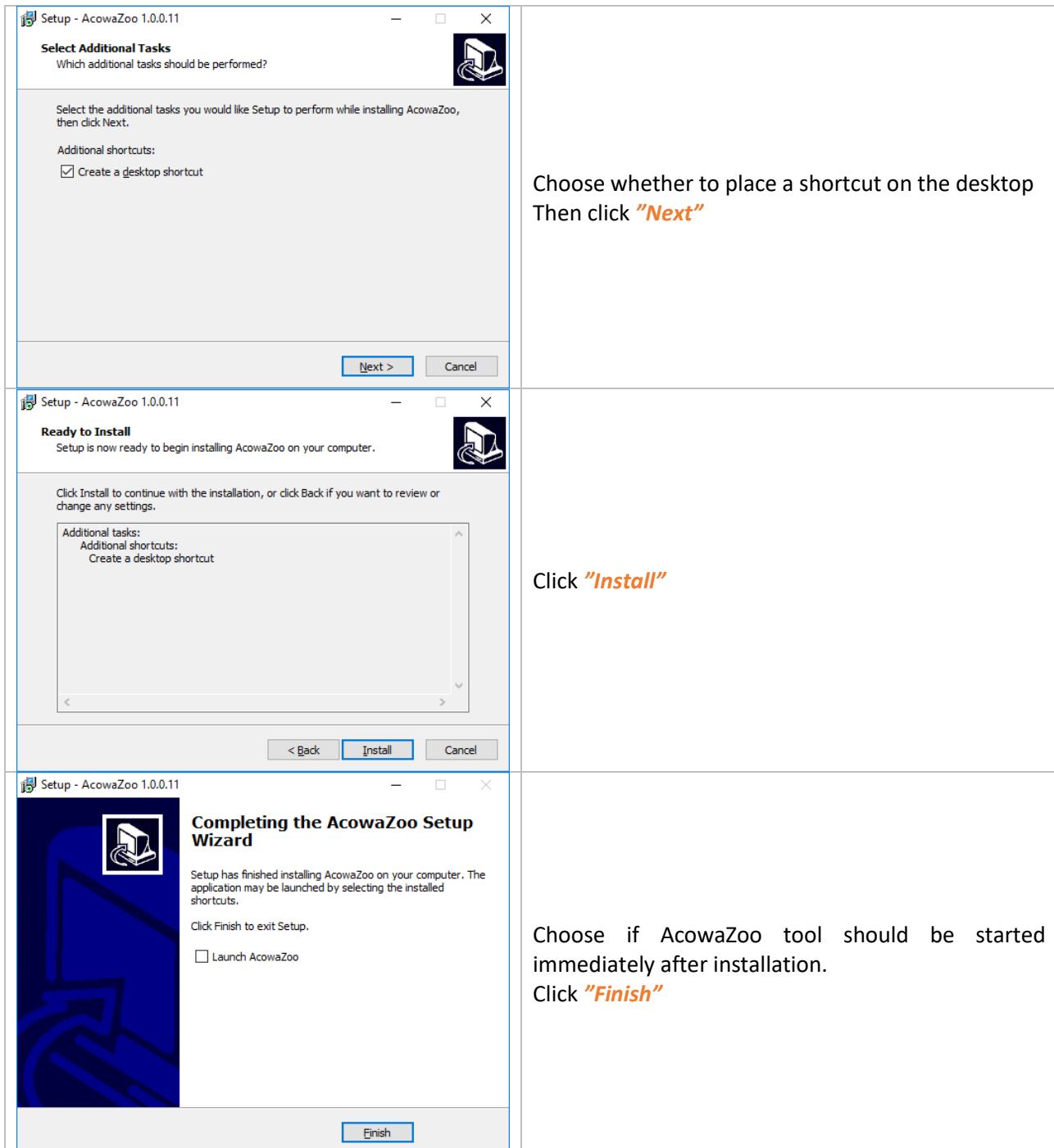
Connecting via TCP

To connect a PUMA using TCP IP, the PUMA needs to be configured with the correct TCP settings (IP address and port). These settings are set using the USB interface to AcowaZoo tool. When TCP-settings in the PUMA is correctly configured a TCP connection can be established.

AcowaZoo - Application

Installation

AcowaZoo tool is compatible with computers using **Windows 7 or 10**. Run the installation program “**AcowaZooSetup.exe**” (“AcowaZooSetup_win32.exe” on 32-bit operating systems) and follow the on-screen instructions:



Driver installation

After installing AcowaZoo tool (and before try device connection and communication), on computers using **Windows 7** operating system, an install of extra driver files will be necessary. Right-click in files available in AcowaZoo tool install directory (typically C:\Program Files\AcowaZoo\driver): “fsl_ucwxp.inf”, “Gekko_usb.inf”, “Puma_usb.inf” and select “install”. Windows will now ask for your permission to install driver files.

NOTE: In some cases, installation requires the use of Windows Device Management. This will require administrative rights.

Overview

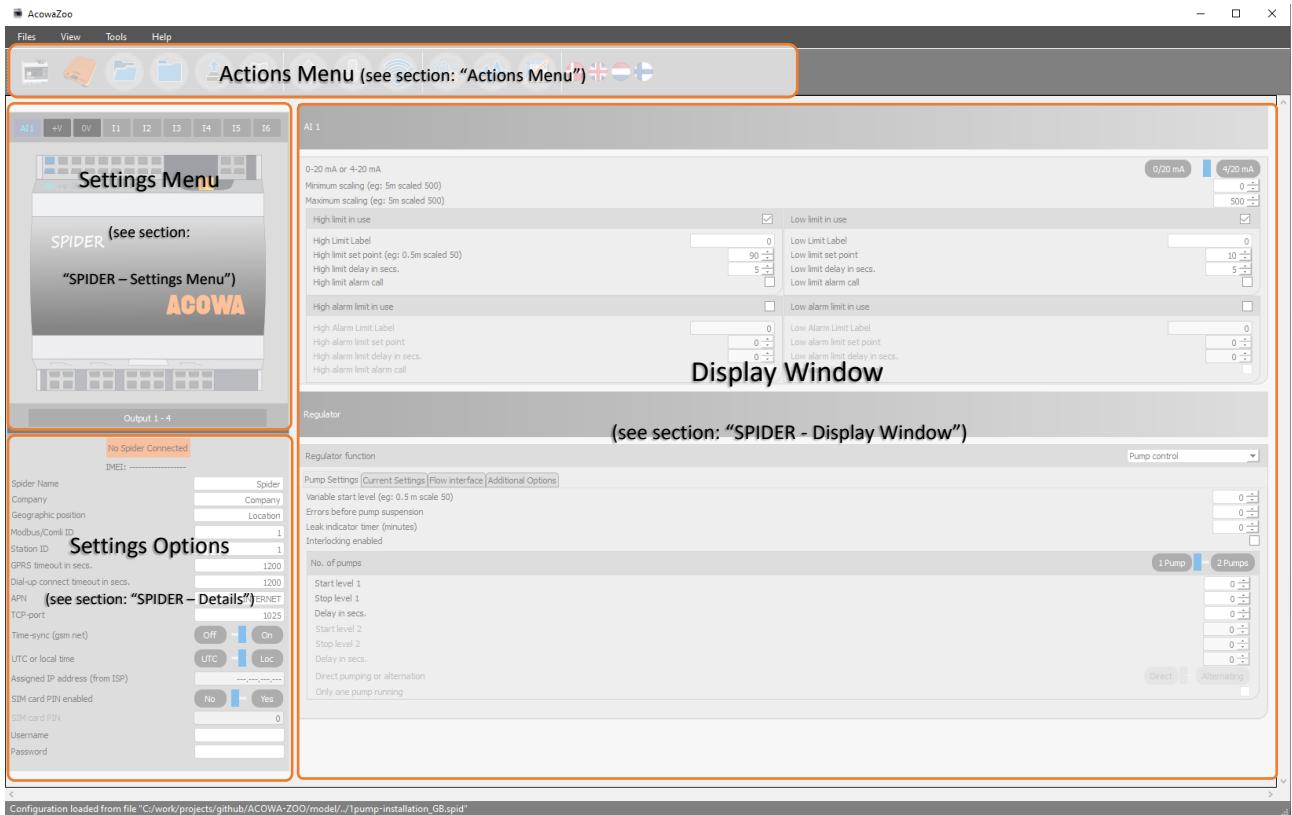
Start AcowaZoo tool application, select the default application language and the device type (SPIDER, GEKKO or PUMA).

Once the AcowaZoo tool application is running, it will automatically check for a SPIDER, GEKKO or PUMA connection via USB.



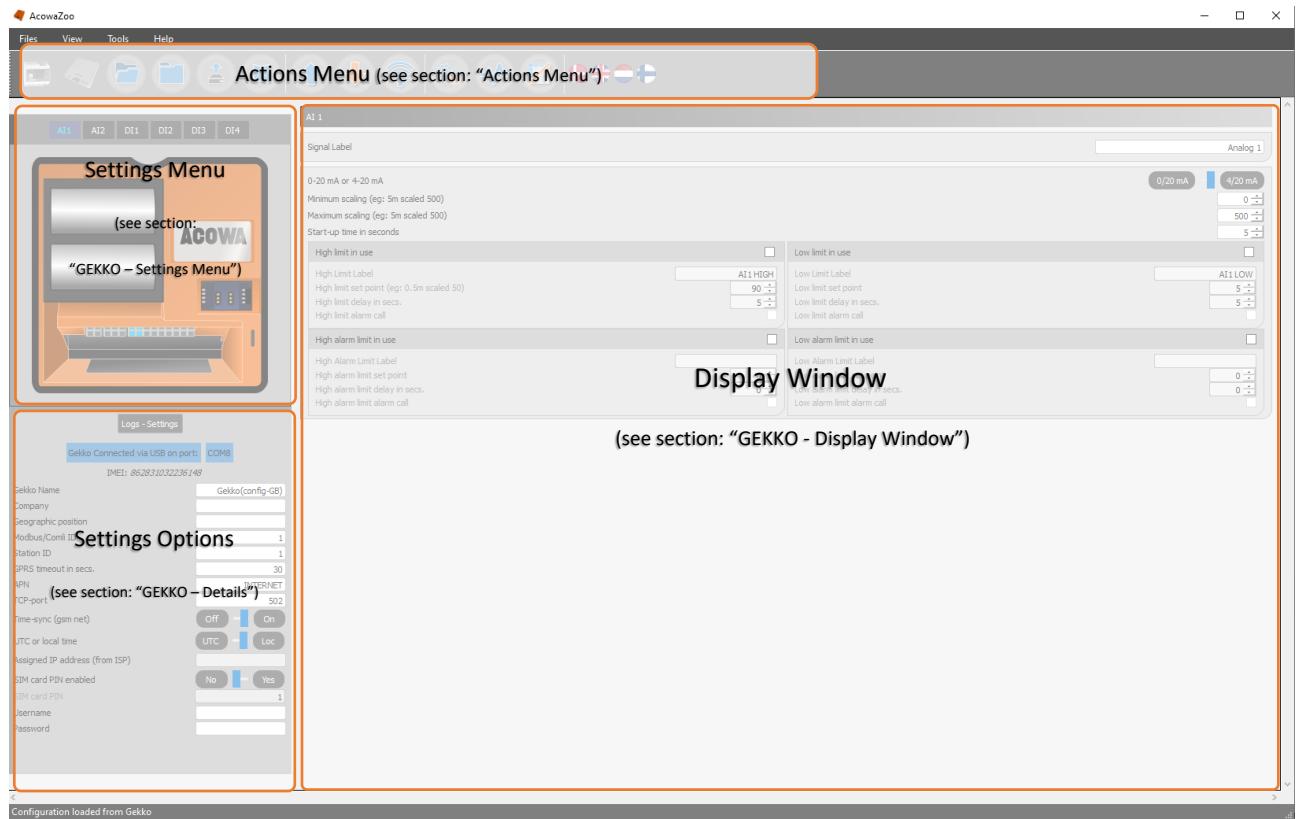
SPIDER View

When a SPIDER device is connected via USB, it can be configured using the tools below.



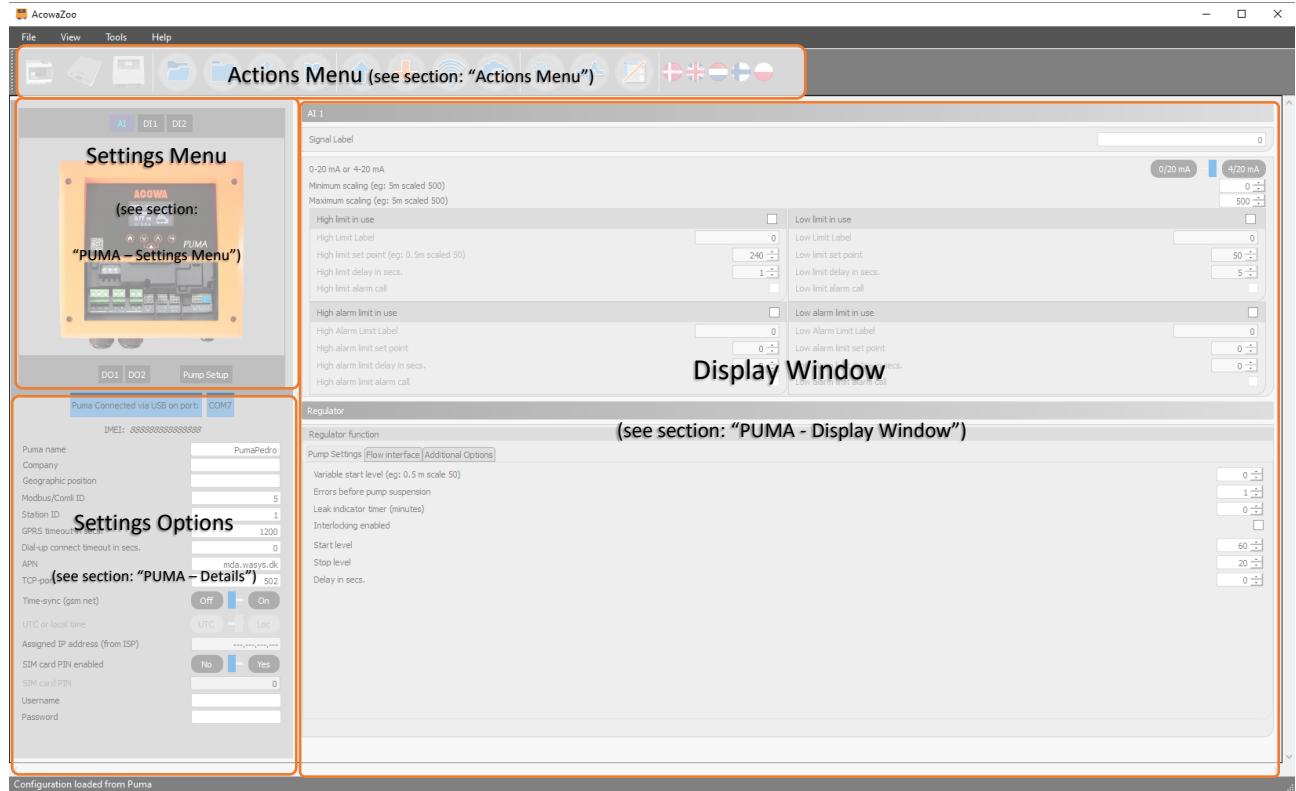
GEKKO View

When a GEKKO device is connected via USB, it can be configured using the tools below.



PUMA View

When a PUMA device is connected via USB, it can be configured using the tools below.



Device Action Menu

Actions such as read/write to device and/or disk, as well as TCP connection, and device status.

	SPIDER view Select SPIDER view to work with SPIDER configurations. Available only in offline mode (no device connected).
	GEKKO view Select GEKKO view to work with GEKKO configurations. Available only in offline mode (no device connected).
	PUMA view Select PUMA view to work with PUMA configurations. Available only in offline mode (no device connected).
	Load Configuration from Disk Loads settings from a file on a disk drive
	Save Configuration to Disk Saves settings to a file on a disk drive
	Load Standard Configuration Choose from typical default configurations (according SPIDER or GEKKO device)
	Backup Operations Backup Operations for read all configurations from a device and save in a file or read all device configurations from a specific file and write to the device.
	Read Configuration from device (SPIDER or GEKKO) Reads settings from the connected device
	Write Configuration to device (SPIDER or GEKKO) Writes settings to the connected device
	Contact device (SPIDER or GEKKO) via TCP Establish TCP communication to a device (will disconnect any USB-connection to a device)
	Contact GEKKO device via AcowaCore Establish asynchronous communication with a GEKKO device via AcowaCore. When connecting via the AcowaCore server, it is possible to select your device by pressing 'Edit', writing configuration changes to it, similar as if you were physically connected to the device via USB connector. The next time the data logger connects to AcowaCore, it

	will first look for configuration changes and store them locally in the device, then it will exchange data with the AcowaCore server.
	Graphical User interface / Text based user interface Change between viewing settings and configurations in a graphical user interface and using a simple table overview of Modbus registers in the specific device
	View advanced settings Edit alarm, flow/overflow calculation settings and more
	Go to Status Page View online device status details
	Software Update feature New AcowaZoo version available for installation. Select “Run Update” to start the installation process.
	Language Options Select application language.

Device Settings

SPIDER – Settings Menu



Choose which part of the SPIDER settings to view in the window on the right:

AI:

Analog Input settings

I1 – I6:

Input 1-6 settings

Output 1-4:

Output 1-4 settings

GEKKO – Settings Menu



Choose which part of the GEKKO settings to view in the window on the right:

AI1-2:

Analog Input 1-2 settings

DI1 – DI4:

Digital Input 1-4 settings

PUMA – Settings Menu



Choose which part of the PUMA settings to view in the window on the right:

Pump Setup:
Pump setup settings

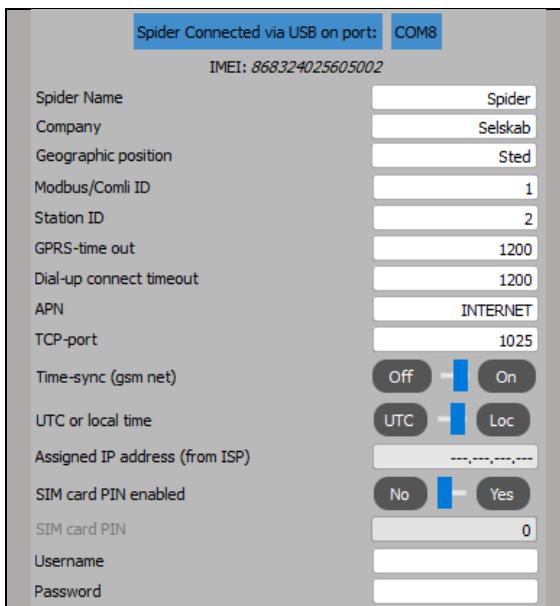
AI1:
Analog Input settings

DI1, DI2:
Digital Input settings

DO1, DO2:
Digital Output settings

Device Details

SPIDER – Details

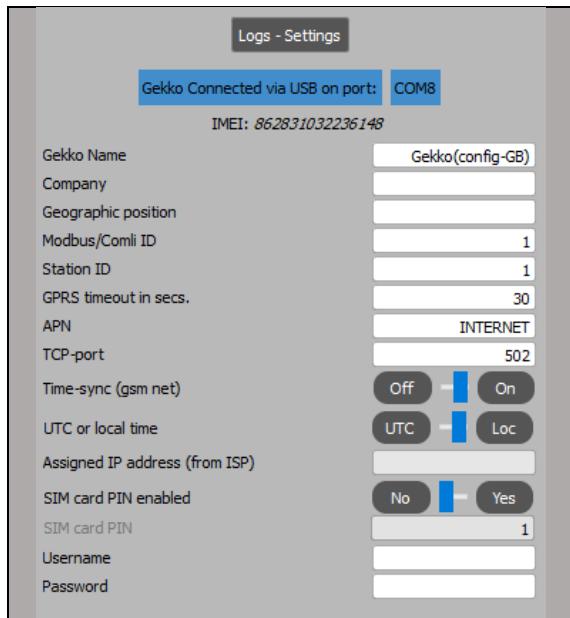


Information on the current SPIDER connection status and type:

- USB via COM-port
- IMEI
- TCP IP-address/port

You will also find details on the SPIDER naming, position and communication details such as APN, and GPRS settings.

GEKKO – Details



The screenshot shows the 'Logs - Settings' interface for a GEKKO device. At the top, it displays 'Gekko Connected via USB on port: COM8' and 'IMEI: 862831032236148'. Below this, there are various configuration parameters:

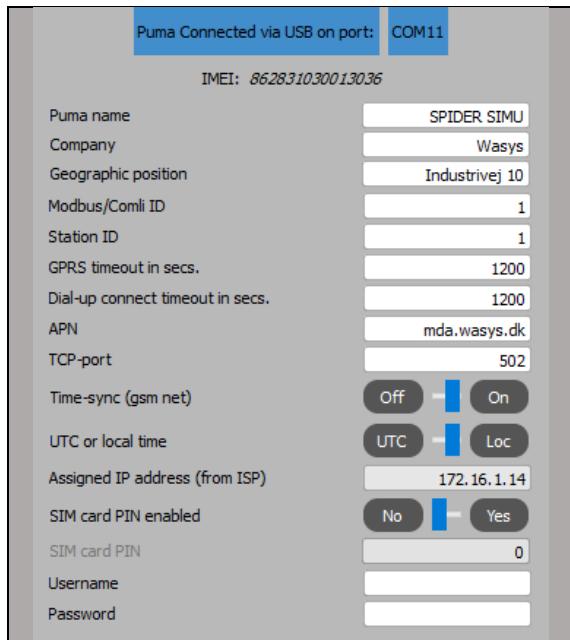
Setting	Value
Gekko Name	Gekko(config-GB)
Company	
Geographic position	
Modbus/Comli ID	1
Station ID	1
GPRS timeout in secs.	30
APN	INTERNET
TCP-port	502
Time-sync (gsm net)	Off — On
UTC or local time	UTC — Loc
Assigned IP address (from ISP)	
SIM card PIN enabled	No — Yes
SIM card PIN	1
Username	
Password	

Information on the current GEKKO connection status and type:

- USB via COM-port
- IMEI
- TCP IP-address/port
- Logs – Settings (Log Interval, Call Interval, Event Signal)

You will also find details on the GEKKO naming, position and communication details such as APN, and GPRS settings.

PUMA – Details



The screenshot shows the 'Logs - Settings' interface for a PUMA device. At the top, it displays 'Puma Connected via USB on port: COM11' and 'IMEI: 862831030013036'. Below this, there are various configuration parameters:

Setting	Value
Puma name	SPIDER SIMU
Company	Wasys
Geographic position	Industrivej 10
Modbus/Comli ID	1
Station ID	1
GPRS timeout in secs.	1200
Dial-up connect timeout in secs.	1200
APN	mda.wasys.dk
TCP-port	502
Time-sync (gsm net)	Off — On
UTC or local time	UTC — Loc
Assigned IP address (from ISP)	172.16.1.14
SIM card PIN enabled	No — Yes
SIM card PIN	0
Username	
Password	

Information on the current PUMA connection status and type:

- USB via COM-port
- IMEI
- TCP IP-address/port

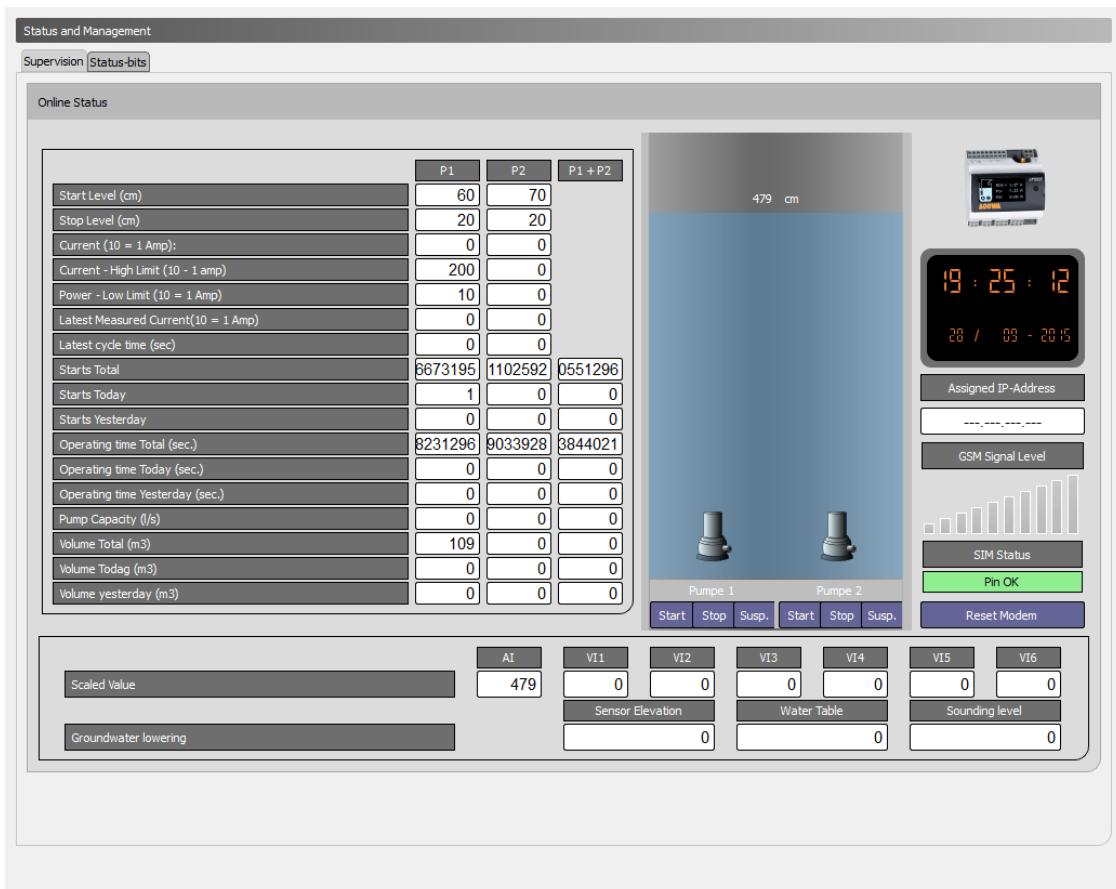
You will also find details on the PUMA naming, position and communication details such as APN, and GPRS settings.

Device Display Window

This window shows the chosen settings according to the selected/pressed button for a device (SPIDER, GEKKO or PUMA), for instance:

- Status settings
- Input settings
- Output settings
- Advanced settings
- Registers table settings

SPIDER - Display window



Edit Registers | Online registers | Input registers | Filter:

Register	Register Name	Min	Max	Description	Value
1	Modbus/Comli ID	0	247	Modbus/Comli ID	1
2	Station ID	1	65535	Station ID	2
3	AI - 0/20 mA or 4/20 mA	0	1	0-20 mA or 4-20 mA	1
4	AI - 0% scale	-30000	30000	Minimum scaling (eg: 5m scaled 500)	0
5	AI - 100% scale	-30000	30000	Maximum scaling (eg: 5m scaled 500)	500
6	AI - Averaging in secs.	0	60	Averaging in secs.	0
7	AI - high limit in use	0	1	High limit in use	1
8	AI - high limit set point	-30000	30000	High limit set point (eg: 0.5m scaled 50)	90
9	AI - high limit delay in secs.	0	60000	High limit delay in secs.	5
10	AI - high limit alarm call	0	1	High limit alarm call	0
11	AI - high alarm limit in use	0	1	High alarm limit in use	0
12	AI - high alarm limit set point	-30000	30000	High alarm limit set point	0
13	AI - high alarm limit delay in secs.	0	60000	High alarm limit delay in secs.	0
14	AI - high alarm limit alarm call	0	1	High alarm limit alarm call	0
15	AI - low limit in use	0	1	Low limit in use	1
16	AI - low limit set point	-30000	30000	Low limit set point	10
17	AI - low limit delay in secs.	0	60000	Low limit delay in secs.	5
18	AI - low limit alarm call	0	1	Low limit alarm call	0
19	AI - low alarm limit in use	0	1	Low alarm limit in use	0
20	AI - low alarm limit set point	-30000	30000	Low alarm limit set point	0
21	AI - low alarm limit delay in secs.	0	60000	Low alarm limit delay in secs.	0
22	AI - low alarm limit alarm call	0	1	Low alarm limit alarm call	0
23	AI - Label			Signal Label	0
24	AI - High Limit Label			High Limit Label	0

AI 1

0-20 mA or 4-20 mA
Minimum scaling (eg: 5m scaled 500)
Maximum scaling (eg: 5m scaled 500)

High limit in use	<input checked="" type="checkbox"/>	Low limit in use	<input checked="" type="checkbox"/>
High Limit Label	0	Low Limit Label	0
High limit set point (eg: 0.5m scaled 50)	90	Low limit set point	10
High limit delay in secs.	5	Low limit delay in secs.	5
High limit alarm call	<input type="checkbox"/>	Low limit alarm call	<input type="checkbox"/>

High alarm limit in use

<input type="checkbox"/>	Low alarm limit in use	<input type="checkbox"/>	
High Alarm Limit Label	0	Low Alarm Limit Label	0
High alarm limit set point	0	Low alarm limit set point	0
High alarm limit delay in secs.	0	Low alarm limit delay in secs.	0
High alarm limit alarm call	<input type="checkbox"/>	Low alarm limit alarm call	<input type="checkbox"/>

Regulator

Regulator function

Pump Settings | Current Settings | Flow interface | Additional Options | Pump control

Variable start level (eg: 0.5 m scale 50)
Errors before pump suspension
Leak indicator timer (minutes)
Interlocking enabled

No. of pumps	1 Pump	2 Pumps
Start level 1	0	0
Stop level 1	0	0
Delay in secs.	0	0
Start level 2	0	0
Stop level 2	0	0
Delay in secs.	0	0
Direct pumping or alternation	<input type="checkbox"/>	Alternating
Only one pump running	<input type="checkbox"/>	

Input 1

Signal Label Termo P1

Input 1 - function

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

Normally Open
5
0

VI Settings

Minimum scaling (eg 20A scaled 200)
Maximum scaling (eg 20A scaled 200)
Averaging in secs.

High limit in use <input type="checkbox"/>	High alarm limit in use <input type="checkbox"/>
High limit Label <input type="text"/> 0	High Alarm Limit Label <input type="text"/> 0
High limit setpoint (eg: 1m scale 10) <input type="button"/> 0	High alarm limit setpoint (eg: 1m scale 10) <input type="button"/> 0
High limit delay in secs. <input type="button"/> 0	High alarm limit delay in secs. <input type="button"/> 0
High limit alarm call <input type="checkbox"/>	High alarm limit alarm call <input type="checkbox"/>

Low limit in use <input type="checkbox"/>	Low alarm limit in use <input type="checkbox"/>
Low limit Label <input type="text"/> 0	Low Alarm Limit Label <input type="text"/> 0
Low limit setpoint (eg: 1m scale 10) <input type="button"/> 0	Low alarm limit setpoint (eg: 1m scale 10) <input type="button"/> 0
Low limit delay in secs. <input type="button"/> 0	Low alarm limit delay in secs. <input type="button"/> 0
Low limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Input 2

Signal Label DI 2

Input 2 - function

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

Normally Open
0
0

VI Settings

Minimum scaling (eg 20A scaled 200)
Maximum scaling (eg 20A scaled 200)
Averaging in secs.

High limit in use <input type="checkbox"/>	High alarm limit in use <input type="checkbox"/>
High limit Label <input type="text"/> 0	High Alarm Limit Label <input type="text"/> 0
High limit setpoint (eg: 1m scaled 10) <input type="button"/> 0	High alarm limit setpoint (eg: 1m scale 10) <input type="button"/> 0
High limit delay in secs. <input type="button"/> 0	High alarm limit delay in secs. <input type="button"/> 0
High limit alarm call <input type="checkbox"/>	High alarm limit alarm call <input type="checkbox"/>

Low limit in use <input type="checkbox"/>	Low alarm limit in use <input type="checkbox"/>
Low limit Label <input type="text"/> 0	Low Alarm Limit Label <input type="text"/> 0
Low limit setpoint (eg: 1m scale 10) <input type="button"/> 0	Low alarm limit setpoint (eg: 1m scale 10) <input type="button"/> 0
Low limit delay in secs. <input type="button"/> 0	Low alarm limit delay in secs. <input type="button"/> 0
Low limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Input 3

Signal Label Current P1

Input 3 - function

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

Normally Open 0 0

VI Settings

Minimum scaling (eg 20A scaled 200)
Maximum scaling (eg 20A scaled 200)
Averaging in secs.

High limit in use <input checked="" type="checkbox"/>	High alarm limit in use <input type="checkbox"/>
High limit Label <input type="text" value="Høj strøm P1"/>	High Alarm Limit Label <input type="text" value="0"/>
High limit setpoint (eg: 1m scaled 10) <input type="button" value="200"/>	High alarm limit setpoint (eg: 1m scaled 10) <input type="button" value="0"/>
High limit delay in secs. <input type="button" value="5"/>	High alarm limit delay in secs. <input type="button" value="0"/>
High limit alarm call <input type="checkbox"/>	High alarm limit alarm call <input type="checkbox"/>

Low limit in use <input checked="" type="checkbox"/>	Low alarm limit in use <input type="checkbox"/>
Low limit Label <input type="text" value="Lav strøm P1"/>	Low Alarm Limit Label <input type="text" value="0"/>
Low limit setpoint (eg: 1m scaled 10) <input type="button" value="10"/>	Low alarm limit setpoint (eg: 1m scaled 10) <input type="button" value="0"/>
Low limit delay in secs. <input type="button" value="0"/>	Low alarm limit delay in secs. <input type="button" value="0"/>
Low limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Input 4

Signal Label DI 4

Input 4 - function

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

Normally Open 0 0

VI Settings

Minimum scaling (eg 20A scaled 200)
Maximum scaling (eg 20A scaled 200)
Averaging in secs.

High limit in use <input checked="" type="checkbox"/>	High alarm limit in use <input type="checkbox"/>
High limit Label <input type="text" value="63560"/>	High Alarm Limit Label <input type="text"/>
High limit setpoint (eg: 1m scaled 10) <input type="button" value="0"/>	High alarm limit setpoint (eg: 1m scale 10) <input type="button" value="0"/>
High limit delay in secs. <input type="button" value="0"/>	High alarm limit delay in secs. <input type="button" value="0"/>
High limit alarm call <input type="checkbox"/>	High alarm limit alarm call <input type="checkbox"/>

Low limit in use <input checked="" type="checkbox"/>	Low alarm limit in use <input type="checkbox"/>
Low limit Label <input type="text"/>	Low Alarm Limit Label <input type="text"/>
Low limit setpoint (eg: 1m scale 10) <input type="button" value="10"/>	Low alarm limit setpoint (eg: 1m scale 10) <input type="button" value="0"/>
Low limit delay in secs. <input type="button" value="0"/>	Low alarm limit delay in secs. <input type="button" value="0"/>
Low limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Input 5

Signal Label DI 5

Input 5 - function Pump 1 - Running

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

VI Settings

Minimum scaling (eg 20A scaled 200)
Maximum scaling (eg 20A scaled 200)
Averaging in secs.

High limit in use	<input type="checkbox"/>
High limit Label	0
High limit setpoint (eg: 1m scaled 10)	0
High limit delay in secs.	0
High limit alarm call	<input type="checkbox"/>

High alarm limit in use	<input type="checkbox"/>
High Alarm Limit Label	0
High alarm limit setpoint (eg: 1m scale 10)	0
High alarm limit delay in secs.	0
High alarm limit alarm call	<input type="checkbox"/>

Low limit in use	<input checked="" type="checkbox"/>
Low limit Label	Lav Strom
Low limit setpoint (eg: 1m scale 10)	10
Low limit delay in secs.	60
Low limit alarm call	<input type="checkbox"/>

Low alarm limit in use	<input type="checkbox"/>
Low Alarm Limit Label	0
Low alarm limit setpoint (eg: 1m scale 10)	0
Low alarm limit delay in secs.	0
Low alarm limit alarm call	<input type="checkbox"/>

Input 6

Signal Label

Input 6 - function High level switch

DI Settings

Normally Open - Normally Closed
Delay for ON-state in secs.
Delay for OFF-state in secs.
Alarm call

High Level Switch Settings

Time before starting second pump (sec.)
Running time when running blind (sec.)

Advanced Settings

Reports and Alarms | Stormflow Registration | Reverse Comm

Daily SMS Status

Daily Status SMS in use

Receiver phone number

time of day (in hours)

Time of day for daily report

Alarms

Alarm 1	Alarm 3
Alarm1 call Type <input type="button" value="Not Used"/>	Alarm3 call Type <input type="button" value="Not Used"/>
Alarm1 phonenumber <input type="text" value="0"/>	Alarm3 phonenumber <input type="text" value="0"/>
Alarm1 Delay <input type="text" value="61"/>	Alarm3 Delay <input type="text" value="61"/>

Alarm 2	Alarm 4
Alarm2 call Type <input type="button" value="Not Used"/>	Alarm4 call Type <input type="button" value="Not Used"/>
Alarm2 phonenumber <input type="text" value="0"/>	Alarm4 phonenumber <input type="text" value="0"/>
Alarm2 Delay <input type="text" value="61"/>	Alarm4 Delay <input type="text" value="61"/>

Output Control

Output 1 - Pump 1 control

Constant or Timed Constant

ON-timer in secs.

Delay for ON-state in secs.

Output 2 - Pump 2 control

Constant or Timed Constant

ON-timer in secs.

Delay for ON-state in secs.

Output 3

Function

Constant or Timed Constant

ON-timer in secs.

Delay for ON-state in secs.

Output 4

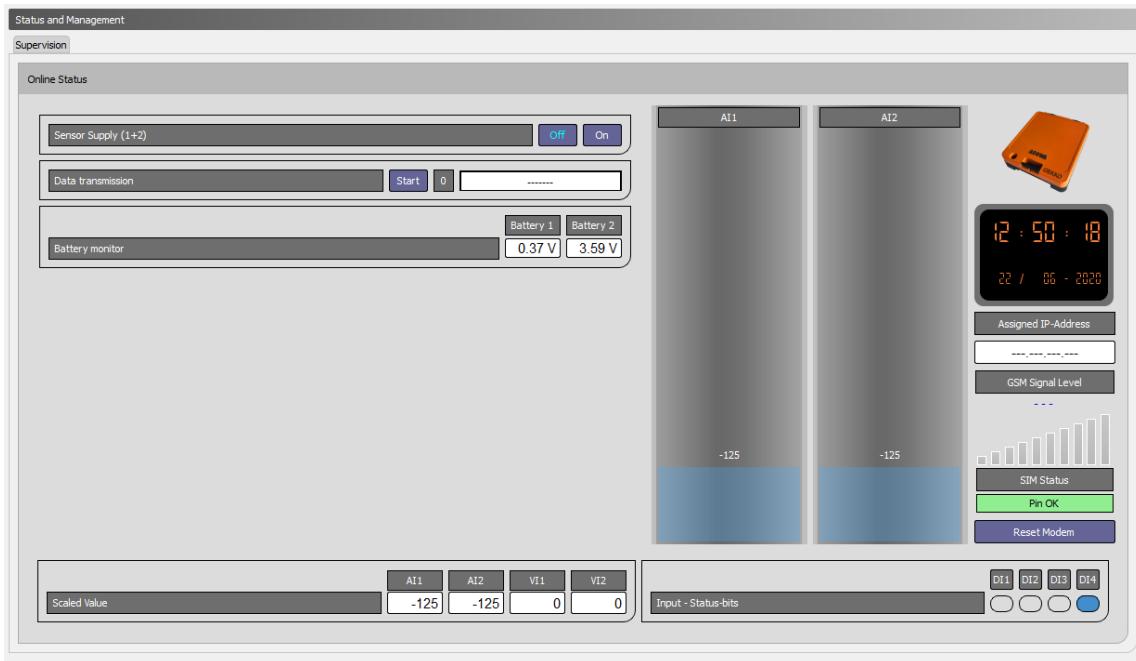
Function

Constant or Timed Constant

ON-timer in secs.

Delay for ON-state in secs.

GEKKO - Display window



Edit Registers					
	Register	Register Name	Min	Max	Description
1	2001	Modbus/Comli ID	0	247	Modbus/Comli ID
2	2002	Station ID	1	65535	Station ID
3	2003	AI - 0/20 mA or 4/20 mA	0	1	0-20 mA or 4-20 mA
4	2004	AI - 0% scale	-30000	30000	Minimum scaling (eg: 5m scaled 500)
5	2005	AI - 100% scale	-30000	30000	Maximum scaling (eg: 5m scaled 500)
6	2006	AI - Start-up time in seconds	0	60	Start-up time in seconds
7	2007	AI - high limit in use	0	1	High limit in use
8	2008	AI - high limit set point	-30000	30000	High limit set point (eg: 0.5m scaled 50)
9	2009	AI - high limit delay in secs.	0	60000	High limit delay in secs.
10	2010	AI - high limit alarm call	0	1	High limit alarm call
11	2011	AI - high alarm limit in use	0	1	High alarm limit in use
12	2012	AI - high alarm limit set point	-30000	30000	High alarm limit set point
13	2013	AI - high alarm limit delay in secs.	0	60000	High alarm limit delay in secs.
14	2014	AI - high alarm limit alarm call	0	1	High alarm limit alarm call
15	2015	AI - low limit in use	0	1	Low limit in use
16	2016	AI - low limit set point	-30000	30000	Low limit set point
17	2017	AI - low limit delay in secs.	0	60000	Low limit delay in secs.
18	2018	AI - low limit alarm call	0	1	Low limit alarm call
19	2019	AI - low alarm limit in use	0	1	Low alarm limit in use
20	2020	AI - low alarm limit set point	-30000	30000	Low alarm limit set point
21	2021	AI - low alarm limit delay in secs.	0	60000	Low alarm limit delay in secs.
22	2022	AI - low alarm limit alarm call	0	1	Low alarm limit alarm call
23	2023	AI - Label			Signal Label
24	2033	AI - High Limit Label			High Limit Label

AI 1

Signal Label

0-20 mA or 4-20 mA 0/20 mA 4/20 mA

Minimum scaling (eg: 5m scaled 500)

Maximum scaling (eg: 5m scaled 500)

Start-up time in seconds

High limit in use <input checked="" type="checkbox"/>	Low limit in use <input checked="" type="checkbox"/>
High Limit Label <input type="text" value="1"/>	Low Limit Label <input type="text" value="1"/>
High limit set point (eg: 0.5m scaled 50)	Low limit set point <input type="text" value="1"/>
High limit delay in secs. <input type="text" value="1"/>	Low limit delay in secs. <input type="text" value="1"/>
High limit alarm call <input checked="" type="checkbox"/>	Low limit alarm call <input checked="" type="checkbox"/>
High alarm limit in use <input checked="" type="checkbox"/>	Low alarm limit in use <input checked="" type="checkbox"/>
High Alarm Limit Label <input type="text" value="1"/>	Low Alarm Limit Label <input type="text" value="1"/>
High alarm limit set point <input type="text" value="1"/>	Low alarm limit set point <input type="text" value="1"/>
High alarm limit delay in secs. <input type="text" value="1"/>	Low alarm limit delay in secs. <input type="text" value="1"/>
High alarm limit alarm call <input checked="" type="checkbox"/>	Low alarm limit alarm call <input checked="" type="checkbox"/>

AI 2

Signal Label

0-20 mA or 4-20 mA 0/20 mA 4/20 mA

Minimum scaling (eg 20A scaled 200)

Maximum scaling (eg 20A scaled 200)

Start-up time in seconds

High limit in use <input checked="" type="checkbox"/>	Low limit in use <input checked="" type="checkbox"/>
High limit Label <input type="text" value="0"/>	Low limit Label <input type="text" value="0"/>
High limit setpoint (eg: 1m scaled 10) <input type="text" value="0"/>	Low limit setpoint (eg: 1m scale 10) <input type="text" value="0"/>
High limit delay in secs. <input type="text" value="0"/>	Low limit delay in secs. <input type="text" value="0"/>
High limit alarm call <input type="checkbox"/>	Low limit alarm call <input type="checkbox"/>
High alarm limit in use <input checked="" type="checkbox"/>	Low alarm limit in use <input checked="" type="checkbox"/>
High Alarm Limit Label <input type="text" value="0"/>	Low Alarm Limit Label <input type="text" value="0"/>
High alarm limit setpoint (eg: 1m scale 10) <input type="text" value="0"/>	Low alarm limit setpoint (eg: 1m scale 10) <input type="text" value="0"/>
High alarm limit delay in secs. <input type="text" value="0"/>	Low alarm limit delay in secs. <input type="text" value="0"/>
High alarm limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Input 1

Signal Label

Input 1 - function Standard VI (VI = volt. In. range 0-10V) ▾

DI Settings

Normally Open - Normally Closed Normally Closed ▾

Start-up time in seconds

Alarm call

VI Settings

Minimum scaling (eg 20A scaled 200)

Maximum scaling (eg 20A scaled 200)

Start-up time in seconds

High limit in use <input checked="" type="checkbox"/> High limit Label <input type="text" value="1"/> High limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> High limit delay in secs. <input type="text" value="1"/> High limit alarm call <input checked="" type="checkbox"/>	High alarm limit in use <input checked="" type="checkbox"/> High Alarm Limit Label <input type="text" value="1"/> High alarm limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> High alarm limit delay in secs. <input type="text" value="1"/> High alarm limit alarm call <input checked="" type="checkbox"/>
Low limit in use <input checked="" type="checkbox"/> Low limit Label <input type="text" value="1"/> Low limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> Low limit delay in secs. <input type="text" value="1"/> Low limit alarm call <input checked="" type="checkbox"/>	Low alarm limit in use <input checked="" type="checkbox"/> Low Alarm Limit Label <input type="text" value="1"/> Low alarm limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> Low alarm limit delay in secs. <input type="text" value="1"/> Low alarm limit alarm call <input checked="" type="checkbox"/>

Input 2

Signal Label

Input 2 - function Standard VI (VI = volt. In. range 0-10V) ▾

DI Settings

Normally Open - Normally Closed Normally Closed ▾

Start-up time in seconds

Alarm call

VI Settings

Minimum scaling (eg 20A scaled 200)

Maximum scaling (eg 20A scaled 200)

Start-up time in seconds

High limit in use <input checked="" type="checkbox"/> High limit Label <input type="text" value="1"/> High limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> High limit delay in secs. <input type="text" value="1"/> High limit alarm call <input checked="" type="checkbox"/>	High alarm limit in use <input checked="" type="checkbox"/> High Alarm Limit Label <input type="text" value="1"/> High alarm limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> High alarm limit delay in secs. <input type="text" value="1"/> High alarm limit alarm call <input checked="" type="checkbox"/>
Low limit in use <input checked="" type="checkbox"/> Low limit Label <input type="text" value="1"/> Low limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> Low limit delay in secs. <input type="text" value="1"/> Low limit alarm call <input checked="" type="checkbox"/>	Low alarm limit in use <input checked="" type="checkbox"/> Low Alarm Limit Label <input type="text" value="1"/> Low alarm limit setpoint (eg: 1m scale 10) <input type="text" value="1"/> Low alarm limit delay in secs. <input type="text" value="1"/> Low alarm limit alarm call <input checked="" type="checkbox"/>

Input 3

Signal Label

Input 3 - function Standard DI

DI Settings

Normally Open - Normally Closed

Start-up time in seconds

Alarm call

Input 4

Signal Label

Input 4 - function Standard DI

DI Settings

Normally Open - Normally Closed

Start-up time in seconds

Alarm call

Pulse scaling

Advanced Settings

Reports and Alarms Reverse Comm Modem Setup

Daily SMS Status

Daily Status SMS in use

Receiver phone number 23

time of day (in hours) 23

Time of day for daily report 23

Alarms

Alarm 1	Alarm 3
Alarm1 call Type <input type="button"/> Not Used	Alarm3 call Type <input type="button"/> Not Used
Alarm1 phonenumber <input type="text"/>	Alarm3 phonenumber <input type="text"/>
Alarm1 Delay <input type="button"/> 60 <input type="button"/>	Alarm3 Delay <input type="button"/> 60 <input type="button"/>

Alarm 2	Alarm 4
Alarm2 call Type <input type="button"/> Not Used	Alarm4 call Type <input type="button"/> Not Used
Alarm2 phonenumber <input type="text"/>	Alarm4 phonenumber <input type="text"/>
Alarm2 Delay <input type="button"/> 60 <input type="button"/>	Alarm4 Delay <input type="button"/> 60 <input type="button"/>

Logs - Settings

Log interval in minutes 5

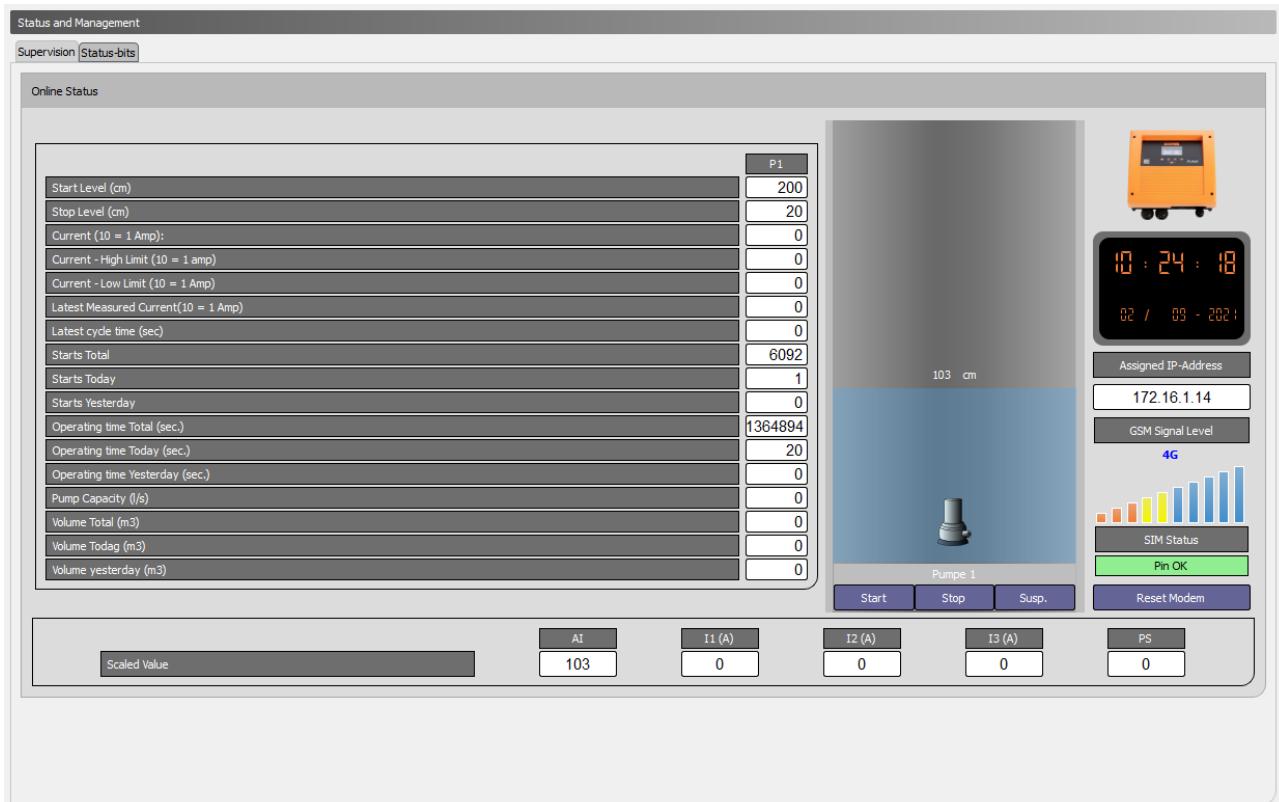
Call interval in minutes 720

Event Signal

Event Log Interval in minutes 0

Event Call Interval in minutes 120

PUMA - Display window



Edit Registers [Online registers] [Input registers]				
Register	Register Name	Min	Max	Description
1	Modbus/Comli ID	0	247	Modbus/Comli ID
2	Station ID	1	65535	Station ID
3	AI - 0/20 mA or 4/20 mA	0	1	0-20 mA or 4-20 mA
4	AI - 0% scale	-30000	30000	Minimum scaling (eg: 5m scaled 500)
5	AI - 100% scale	-30000	30000	Maximum scaling (eg: 5m scaled 500)
6	AI - Averaging in secs.	0	60	Averaging in secs.
7	AI - high limit in use	0	1	High limit in use
8	AI - high limit set point	-30000	30000	High limit set point (eg: 0.5m scaled 50)
9	AI - high limit delay in secs.	0	60000	High limit delay in secs.
10	AI - high limit alarm call	0	1	High limit alarm call
11	AI - high alarm limit in use	0	1	High alarm limit in use
12	AI - high alarm limit set point	-30000	30000	High alarm limit set point
13	AI - high alarm limit delay in secs.	0	60000	High alarm limit delay in secs.
14	AI - high alarm limit alarm call	0	1	High alarm limit alarm call
15	AI - low limit in use	0	1	Low limit in use
16	AI - low limit set point	-30000	30000	Low limit set point
17	AI - low limit delay in secs.	0	60000	Low limit delay in secs.
18	AI - low limit alarm call	0	1	Low limit alarm call
19	AI - low alarm limit in use	0	1	Low alarm limit in use
20	AI - low alarm limit set point	-30000	30000	Low alarm limit set point
21	AI - low alarm limit delay in secs.	0	60000	Low alarm limit delay in secs.
22	AI - low alarm limit alarm call	0	1	Low alarm limit alarm call
23	AI - Label			Signal Label
24	AI - High Limit Label			High Limit Label
25	AI - Low Limit Label			Low Limit Label

Pump Setup

Pump control

Deactivate protected startup settings

Number of phases (0 = 1 phase, 1= 3 phases)

Pump Current (10 = 1 Amp)

Primary Sensor

Float Switch

Klixon connected

Percentage of rated Pump Current

Trip Class

Running time when running blind (sec.)

Puma HMI

HMI Language

Output Control

Output 1

Function

Constant or Timed Timed

ON-timer in secs.

Delay for ON-state in secs.

Output Control

Output 2

Function

Constant or Timed Timed

ON-timer in secs.

Delay for ON-state in secs.

Input 1

Signal Label Port Lukket

Input 1 - function

DI Settings

Normally Open - Normally Closed Normally Open

Delay for ON-state in secs.

Delay for OFF-state in secs.

Alarm call

Input 2

Signal Label Venstre Port Åben

Input 2 - function

DI Settings

Normally Open - Normally Closed Normally Open

Delay for ON-state in secs.

Delay for OFF-state in secs.

Alarm call

AI 1

Signal Label

0-20 mA or 4-20 mA
Minimum scaling (eg: 5m scaled 500)
Maximum scaling (eg: 5m scaled 500)

<input checked="" type="checkbox"/> High limit in use	<input type="checkbox"/> Low limit in use
High Limit Label <input type="text" value="high label"/>	Low Limit Label <input type="text" value="low label"/>
High limit set point (eg: 0.5m scaled 50) <input type="text" value="85"/>	Low limit set point <input type="text" value="10"/>
High limit delay in secs. <input type="text" value="4"/>	Low limit delay in secs. <input type="text" value="10"/>
High limit alarm call <input type="checkbox"/>	Low limit alarm call <input type="checkbox"/>
<input type="checkbox"/> High alarm limit in use	<input type="checkbox"/> Low alarm limit in use
High Alarm Limit Label <input type="text" value="0"/>	Low Alarm Limit Label <input type="text" value="0"/>
High alarm limit set point <input type="text" value="0"/>	Low alarm limit set point <input type="text" value="0"/>
High alarm limit delay in secs. <input type="text" value="0"/>	Low alarm limit delay in secs. <input type="text" value="0"/>
High alarm limit alarm call <input type="checkbox"/>	Low alarm limit alarm call <input type="checkbox"/>

Regulator

Regulator function

Pump Settings Flow interface Additional Options

Variable start level (eg: 0.5 m scale 50)
Errors before pump suspension
Leak indicator timer (minutes)
Interlocking enabled
Start level 1
Stop level 1
Delay in secs.

Advanced Settings

Reports and Alarms Stormflow Registration Reverse Comm Modem Setup

Daily SMS Status

Daily Status SMS in use
Receiver phone number
Time of day (in hours)
Time of day for daily report

Alarms

Alarm 1	Alarm 3
Alarm1 call Type <input type="text" value="Not Used"/>	Alarm3 call Type <input type="text" value="Not Used"/>
Alarm1 phonenumber <input type="text" value="0"/>	Alarm3 phonenumber <input type="text" value="0"/>
Alarm1 Delay <input type="text" value="60"/>	Alarm3 Delay <input type="text" value="60"/>
Alarm 2	Alarm 4
Alarm2 call Type <input type="text" value="Not Used"/>	Alarm4 call Type <input type="text" value="Not Used"/>
Alarm2 phonenumber <input type="text" value="0"/>	Alarm4 phonenumber <input type="text" value="0"/>
Alarm2 Delay <input type="text" value="60"/>	Alarm4 Delay <input type="text" value="60"/>