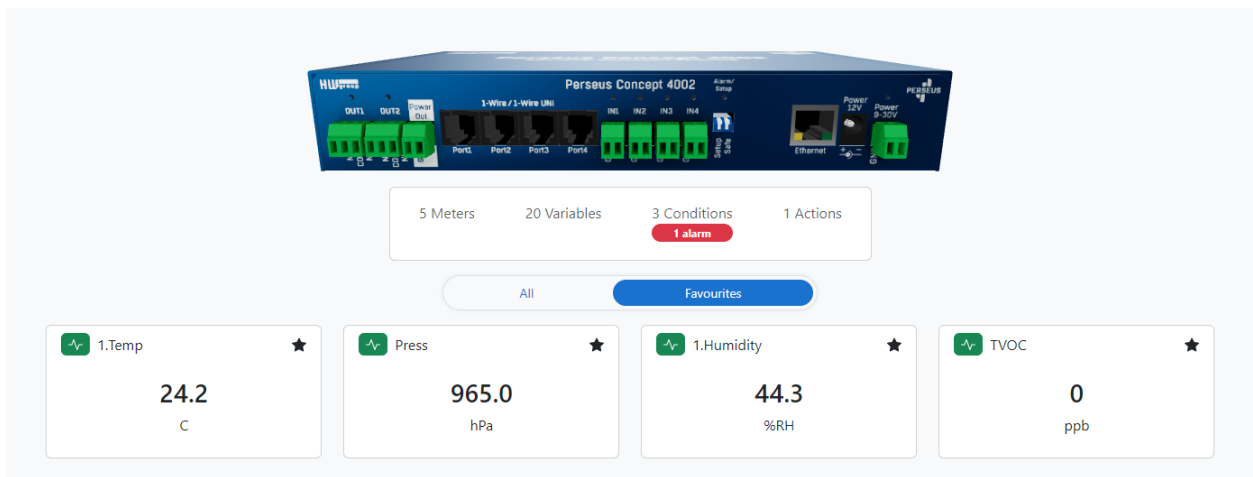




Perseus Concept Quick Start Guide

v. 1.0.4.; UPDATED: 29.11.2023



Congratulations! You've got a HWg Perseus Concept 4002 unit at your desk. Please, remember that this is a pre-release Concept model, which means that the hardware of this sample is not final and does not correspond to the models that would actually be offered.

You have this device because as one of our trusted partners, we value your time and effort, and want you to familiarize yourself with the platform before it hits the market.

If you have any questions, comments or suggestions, please send them to support@hwg.cz

Please note that you may not sell or give away this product, nor may you disclose any information about this product, including potential features, prices, etc., to competitors. It's a concept, which means it may contain bugs or intentionally modified behavior. It's not intended for "production" operation - life, health, protection of property, etc. cannot depend on it. Possible exceptions are possible after consultation and obtaining permission from HW group s.r.o. This device does not contain a GSM modem.

Safety information

The device complies with regulations and industrial standards in force in the Czech Republic and the European Union. The device has been tested and is supplied in working order. To keep the device in this condition, it is necessary to adhere to the following safety and maintenance instructions.

Never remove the device cover if the relay terminals are connected to the electrical network!

Using the device in a manner other than prescribed by the manufacturer may cause its safeguards to fail!

The power supply outlet or disconnection point must be freely accessible.

The device must not be used in particular under any of the following conditions:

- The device is noticeably damaged
- The device does not function properly

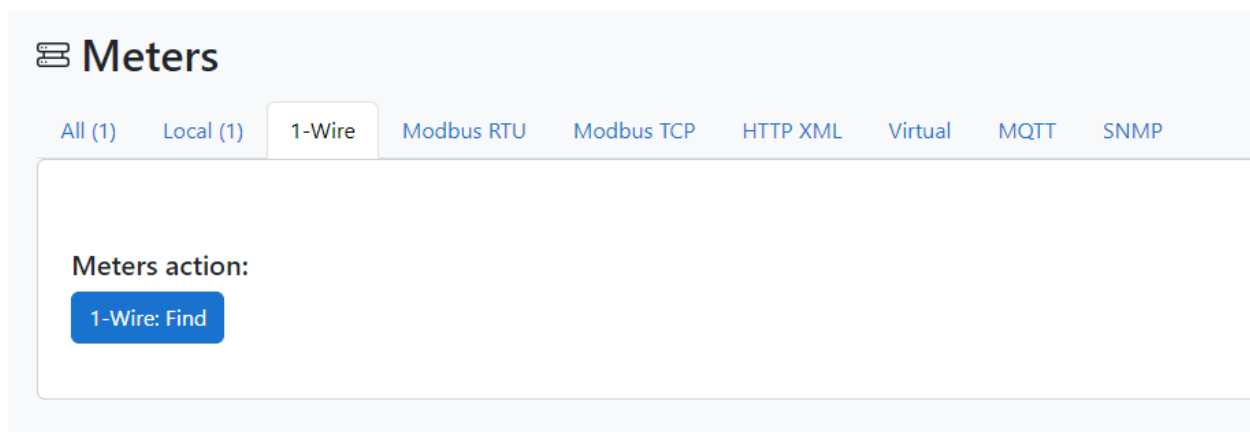
- Unfastened parts can move inside the device
- The device has been exposed to moisture or rain
- The device has been serviced by unauthorized personnel
- The power adapter or power supply cable are noticeably damaged
- If the device is used in a manner other than designed for, the protection provided by the device may fail.
- The local electrical system must include a power switch or a circuit breaker and overcurrent protection.

The manufacturer warrants the device only if it is powered by the supplied power adapter or an approved power supply.

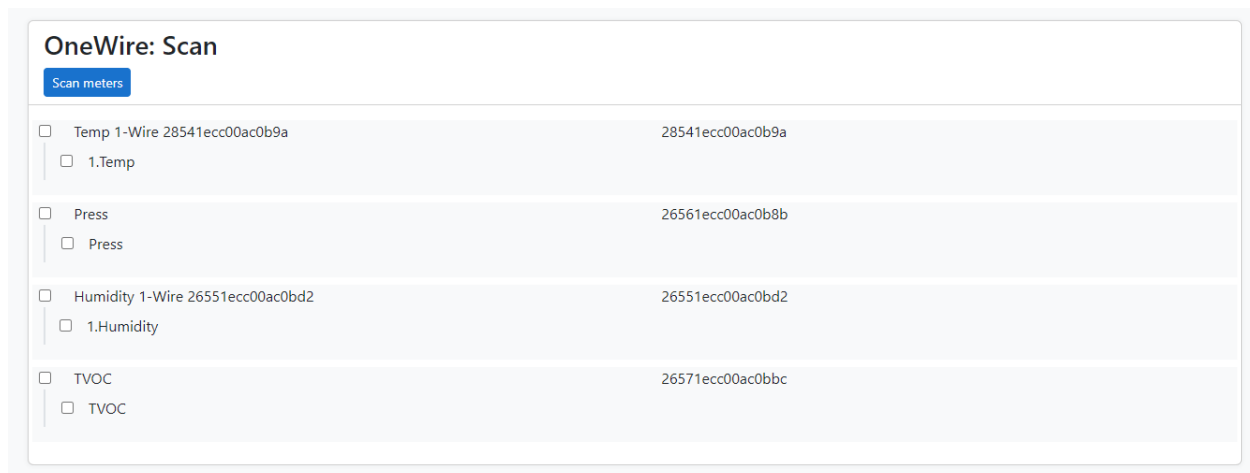
Let's take a look at how this device works with the **1-Wire UNI THPVoc** sensor.

Connecting the sensor and finding the **Meter**

1. Plug in the **THPVoc 1-Wire UNI sensor** to one of the six 1-Wire ports available at your device. We chose the Port 5.
2. Go to **Monitoring -> Meters -> 1-Wire** and click **1-Wire: Find**



3. Click **Scan Meters**
4. You should now see **4 meters** found with **1 variable** each:



5. Check them and click **Save**. Now you have meters with variables available at the **Home Screen**:

Meters

All (5) Local (1) 1-Wire (4) Modbus RTU Modbus TCP HTTP XML Virtual MQTT SNMP

1	System Meter 1	Ok				Variables 16	
101	Temp 1-Wire 28541ecc00ac0b9a	Ok	28541ecc00ac0b9a			Variables 1	
	101.101001	1.Temp	Ok	Sensor			24.3
102	Press	Ok	26561ecc00ac0b8b			Variables 1	
	102.102001	Press	Ok	Sensor			965.8
103	Humidity 1-Wire 26551ecc00ac0bd2	Ok	26551ecc00ac0bd2			Variables 1	
	103.103001	1.Humidity	Ok	Sensor			44.3
104	TVOC	Ok	26571ecc00ac0bbc			Variables 1	
	104.104001	TVOC	Ok	Sensor			0

Meters action:

1-Wire: Find Modbus RTU: Add Modbus TCP: Add Network scan Network: Add Virtual: Add MQTT: Add SNMP: Add

Creating a **Condition** with the **Variable**

Let's say you want to define the **Safe Range** for the temperature variable.

1. You can go **Variables** or click the **Temperature variable** from the **Meters tab**.

Meters ▾ Temp 1-Wire 28541ecc00ac0b9a Variables ▾ 1.Temp

Configuration

Enable

Name

Home page favourite

Type

Decimal digits Affects value's calculation and display

Unit

Calculation formula
 Measured value equals the value. No transformation is being executed.

Details

24.3

C

ID 101001

Value 24.3

State Alarm high

Dynamic view

Value Names

Value	Name

Conditions

ID	Name	Enabled	Min	Max	Hysteresis	Delay
1	Condition 101.101001.1	<input checked="" type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

2. As you can see, the **Variable** is in alarm, because the **Min-Max** thresholds are set to 0. Let's change the **Max** threshold to **30** degrees Celsius and click Save. The Variable would go from Alarm state to Ok.
3. You can create as many **Conditions** as you want, because each **Action** is made upon **Condition** and different **Conditions** could mean different **Actions**.

Conditions

ID	Name	Enabled	Min	Max	Hysteresis	Delay
1	Condition 101.101001.1	<input checked="" type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="30"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
2	Condition 101.101001.2	<input checked="" type="checkbox"/>	<input type="text" value="-50"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
3	Condition 101.101001.3	<input checked="" type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="35"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

4. In this case, we created three **Conditions** that would trigger an action when the **Value** exceeds the threshold in any direction. Let's go to **Condition 1**, with the **Max 30**.

The screenshot shows the configuration interface for a condition named 'Condition 101.101001.1'. The 'Configuration' section includes a name field, an 'Enable' checkbox, and numerical input fields for 'Min', 'Max', 'Hysteresis', and 'Delay'. The 'Schedule' section features an 'Active on' dropdown menu. The 'Actions' section at the bottom indicates that no actions are currently assigned and provides options to assign an action or create a new one.

Create an Action upon the Condition

1. You can make a schedule upon **Condition** that would further modify the **Actions**. Right now, let's create a new Action as an Email:

The 'New Action' dialog box is shown with the 'Type' dropdown set to 'Email' and the 'Name' field containing 'Temp alert'. The 'Create' button is highlighted in blue, indicating it is the primary action.

2. We will choose the execution filter to execute an **Action** when **Any condition enters alarm** state, and pick the **Email Template 1** - pre-set one, and click **Save**.

▶ Temp alert
✖

Name

Enable

Cooldown period
 milliseconds

Type
 Email

Template

✓ ▾
✎
[Templates settings](#)

Suppress execution after device start

Action targets
[Target settings](#) Edit

ⓘ This action needs to have a target in order to be executed

Action triggers

📄 **Conditions**
Edit

Conditions trigger this action upon filtered state change

Execution filter (Execute action when):

- Any condition changes state
- Any condition enters alarm
- Any condition enters normal
- Every condition enters alarm
- At least one condition enters normal
- Every condition enters normal
- At least one condition enters alarm

🕒 **Planners**
[Planners settings](#) Edit

Planners execute this action at specified time

3. Now we need to create a **target**:

Add target ✕

Name
Temp 30 or above

Email address
@ alert@hwg.cz

Phone
yourphonenumber

Close Save

4. And assign it:

Assign targets ✕

1	Temp 30 or above	alert@hwg.cz	<input checked="" type="checkbox"/>
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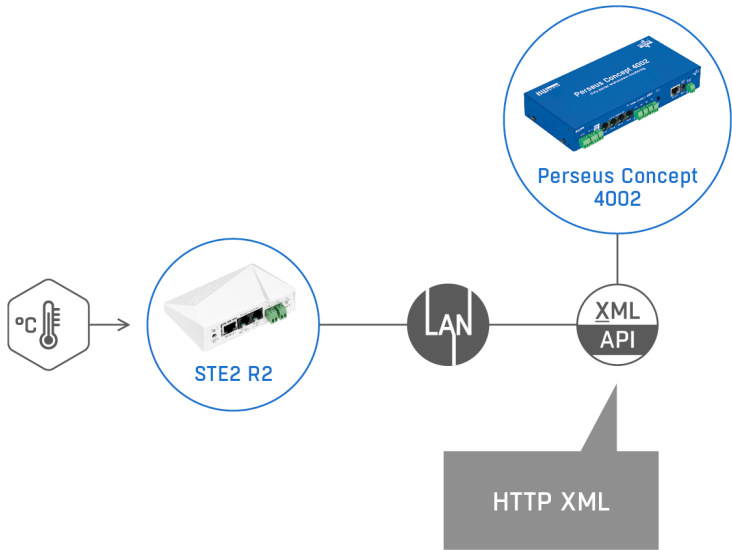
Close Save

5. That's it. Now whether your Perseus is connected to the SensDesk Technology based portal, or a private (or public, though we do not recommend such configuration) SMTP server, an **Alarm email** would be sent by the device to the target.

Connecting another HW-group device to the Perseus unit

Perseus units are able to connect other HWgroup devices as **Meters**.

Perseus is reading data from XML API



The easiest way to do this is to scan you local network, for example for a connected STE2 unit.

1. Go to **Monitoring** -> **Meters** -> Network scan in Meters action:

The screenshot shows the 'Meters' interface with a list of meters and a 'Network scan' button in the 'Meters action' section.

ID	Name	Status	Address	Variables	Actions
1	System Meter 1	Ok		Variables 16	[Edit] [Delete]
101	Temp 1-Wire 28541ecc00ac0b9a	Ok	28541ecc00ac0b9a	Variables 1	[Edit] [Delete]
102	Press	Ok	26561ecc00ac0b8b	Variables 1	[Edit] [Delete]
103	Humidity 1-Wire 26551ecc00ac0bd2	Ok	26551ecc00ac0bd2	Variables 1	[Edit] [Delete]
104	TVOC	Ok	26571ecc00ac0bbc	Variables 1	[Edit] [Delete]

Meters action:

[1-Wire: Find] [Modbus RTU: Add] [Modbus TCP: Add] [Network scan] [Network: Add] [Virtual: Add] [MQTT: Add] [SNMP: Add]

2. Find the device you want to connect to Perseus and click Scan variables:

<input type="checkbox"/>	STE2 LITE Prague Online	192.168.103.188	Model: 102	Scan variables
<input type="checkbox"/>	STE2 r2 5905-E7FB	192.168.103.155	Model: 91	Scan variables

3. Check the found **Variables** and Save:

Meters ▾ STE2 r2 5905-E7FB

Details

ID: 601
Name: STE2 r2 5905-E7FB
Type: Net
Port: 0
State: Ok

Configuration

Enable

Name:

Measure period: Sec

Device URL:

Device pathname:

Authorization: Username
Password

[Manual Read](#)

Debug log

Variables

[Scan variables](#) [+](#)

ID	Name	State	Value	Unit	Options
601001	Input 1	Ok	0		✎ ✖
601002	Input 2	Ok	0		✎ ✖
636186	Sensor 35186	Ok	23.1	C	✎ ✖

Now the STE2 R2 device is a **Meter** within Perseus system, and all the sensors and detectors connected to it are available for further management as **Variables**. The same way they would as if connected directly.

Any HW group product: device, sensor, even an XML API output from the SensDesk account could be connected to the Perseus monitoring unit in the same way.

Additional information

- 1) Before upgrading the firmware on Perseus Concept, please save the backup configuration file - changes in structure are possible;
- 2) Perseus is not backwards compatible with Poseidon 2 series:
 - You can use 1-Wire sensors;
 - You can use HWg-Config;
 - SensDesk Technology based portal support may not be available right now, although it definitely would be with the release.

