PRODUCT OVERVIEW

2026

Standalone Monitoring | IoT Monitoring | Sensors & Detectors | System Solutions

www.HW-group.com

The HW group company is a manufacturer of an RME (Remote Monitoring Ecosystem). Our sensors are used for remote monitoring of AV racks, museums, meeting rooms, or data centers. We provide data to help reduce energy consumption and improve your ESG compliance.

1) Our products can be used for long-term, reliable remote monitoring and alerting.
2) Our customers purchase assurance that everything is okay in their remote locations.
3) System Integrators all around the world use our components for their projects in museums, schools, public buildings, etc.
4) Energy consumption for billing or analysis is a growing part of our business.
5) Our portal can be used to offer remote monitoring as a monthly paid service.

Our portfolio now consists of more than 300 different product items and we distribute them globally with a network of 50 distributors, our distribution network span Europe, the Middle East, Australia, Africa and South & North America.

RME – Remote Monitoring Ecosystem

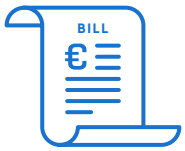
It starts with one temperature sensor and ends with a voice call alert, PDF report, or graph. Our system uses data from electricity or water meters and gives reports for bills and ESG data.
We offer a reliable ecosystem for B2B customers with hundreds of devices and thousands of sensors within a single project. The entire system is industrial-grade, secure, and proven.

- 70+ different Sensors & Detectors (temperature, Humidity, voltage, energy, ...).
- 30+ device types you can use with or without the portal.
- Various IP connectivity: LAN, WiFi, GSM, LTE, NB-IoT.
- SensDesk Technology portal (SaaS / on-premise).
- Many 3rd party meters can be connected to RME (Remote Monitoring Ecosystem).
- Our portal acts as **middleware**; it can be connected to 3rd party systems like SAP, NMS or SCADA.

Applications

Rack monitoring

- Temperature, power failure
- Energy consumption
- Remote I/O monitoring
- Email / SMS alerting



Remote energy monitoring / Billing

- Electricity, Gas, Water, Heat and more
- Portal solutions (On premise / SaaS)
- Extended alerting (broken water pipeline, ...)
- PDF reports or SAP / NMS export

WLD (Water Leak Detection) for Museums

- Water sensing cable = early warning
- Multi-zone detection
- Easy to install / reliable detection

Warehouse monitoring

- Power consumption monitoring
- Energy savings
- Process oriented reports

ESG data for Public buildings / Schools

- Fast alerting for Facility Management
- Long-term reliable environmental data analysis
- Data export to SAP, SCADA, NMS

Remote monitoring of meeting rooms

- AV racks temperature
- Environmental monitoring (CO_2, Temperature)
- Occupancy & utilization monitoring

Perseus

The Perseus platform is designed to read values from connected sensors and detectors. Perseus records these values, evaluates them, and performs calculations. Alarming can be based on these values, switched outputs, or processed calculations.

Sensor, detector and digital output values are synchronized with the Open API of the Perseus device or with a remote portal (based on SensDesk Technology).

New to the Perseus platform features include custom (Lua) scripts, local simple calculations, and virtual sensor values or conditions.

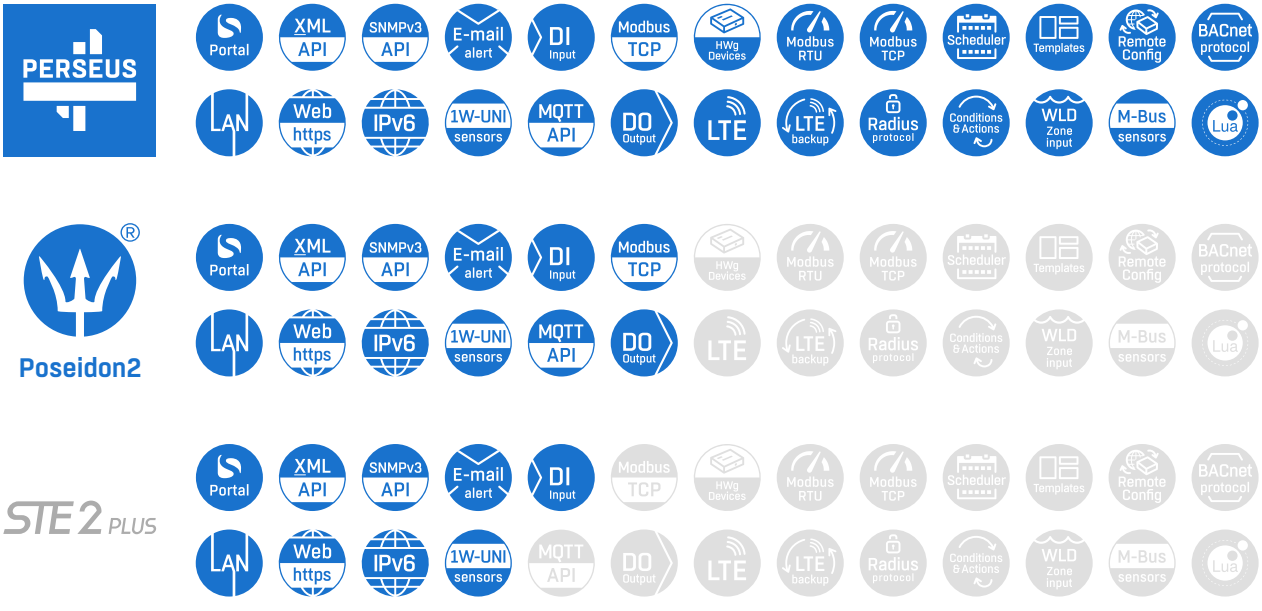
Platform features

- Integrated LTE modem for backup connectivity and SMS/Call alerts.
- 802.1X central security management.
- Support for 3rd party sensors.
- Variables can have multiple conditions and actions.
- Remote configuration with SensDesk Technology
- Local calendar based scheduler.
- WLD zone input for the sensing cable.
- Local custom scripts in Lua.
- Templates repository for 3rd party sensors.
- BACnet protocol integration

Meters API

- Any HWg device (XML) on the LAN can be used (r/w) with Perseus.
- Any Modbus/TCP device can be used (r/w) with Perseus.
- Any MQTT broker can be used (r/w) with Perseus.
- Any SNMP v1/3 can be used (r/w) with Perseus.

Features comparison



Perseus Monitoring

A core family of products designed for environmental monitoring in IT, pharmaceutical, food and other industries, including support for independent audits for quality management systems (ISO) and specific professional certifications.

Perseus Monitoring 150 and **155** is a complex 1U solution for a 19" rack monitoring system in data centers, AV installations, telecommunications, etc. Integrated LTE modem in the 145 and 155 units provides backup connectivity and SMS / Call alerts. Perseus Monitoring 140 and 145 differ from 150 and 155 by the amount of available interfaces in a smaller casing.

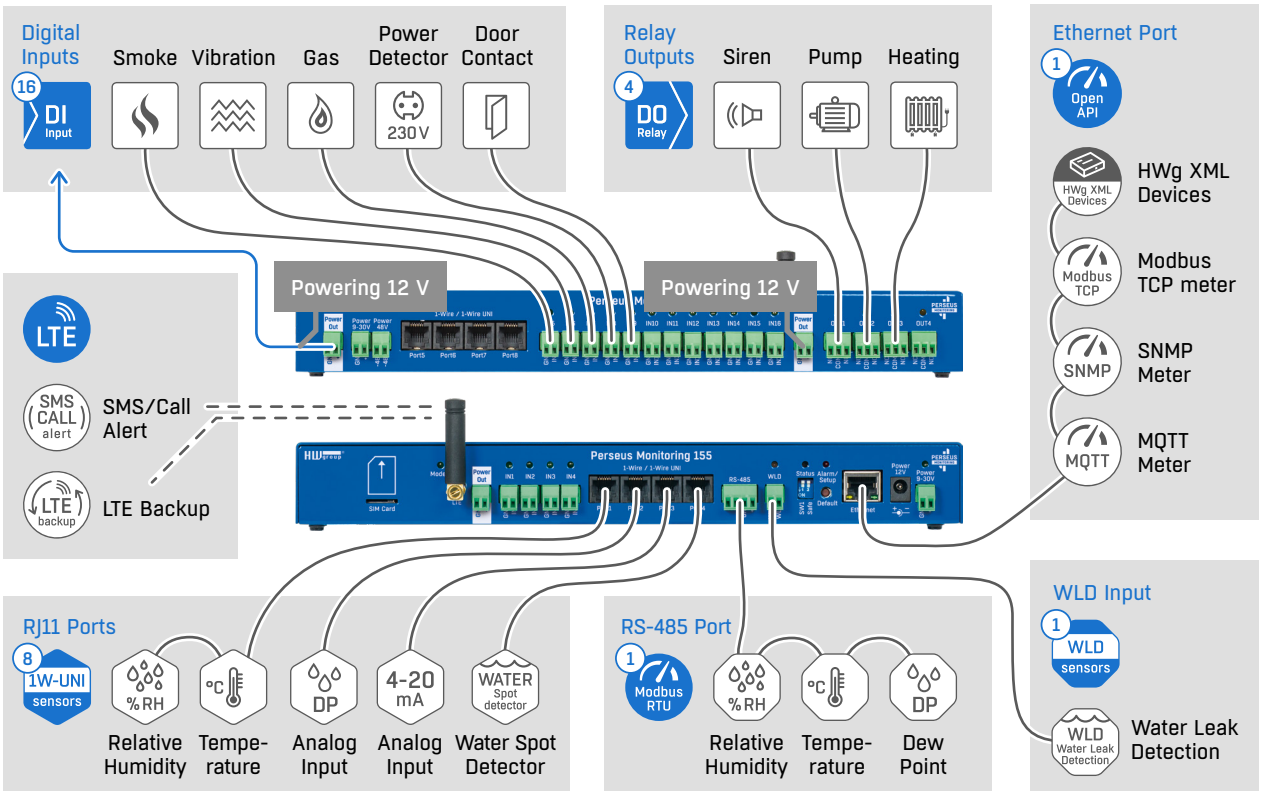
Perseus Monitoring 145 and **155** uses LAN as the primary connection and LTE as a backup connection when LAN is unavailable. The device connects external physical sensors (°C, %RH, A, V, ...), DI (Digital Inputs), WLD (Water Leak Detection) zone, DO (Digital Outputs) and 3rd party meters via LAN or RS-485 (Modbus/RTU). All sensor data is analyzed and processed by the Perseus device. There is a limit of 100 meters / 1000 values (variables).

A unique feature of the Perseus family is the ability to connect other HWg devices connected via LAN as external meters. Local conditions, Lua scripting, and calendar help with measured data processing. Physical RS-485 supports Modbus/RTU meters (R/W), it allows to connect 3rd party devices. Many devices from other vendors such as electricity meters, UPS or GenSet can be connected to Perseus and the SensDesk Technology-based Portal this way. Perseus Monitoring 155 has one physical port (1 zone) for connection of WLD sensing cable. 4 DO (Relay Outputs) can be controlled by Perseus local alarms, conditions and Lua scripting.

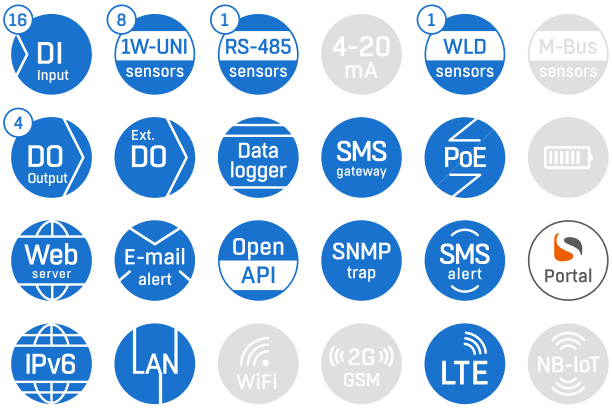
For email alerting, we recommend to use Portal - it's faster and more reliable in case of LAN / LTE connectivity combination.

Typical applications include remote rack / server room monitoring and alerting. Several alerting options are supported by Perseus (Email, SMS, Call, SNMP trap, Output switching, etc.), allowing flexible alert setup.

Mobile App can be used to display the status of all connected meters via LAN directly or via SensDesk.com Portal.



Perseus Monitoring 155



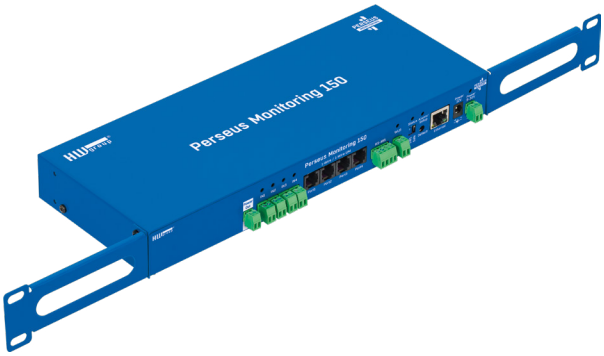
Top-of-the-line LAN solution for any remote monitoring scenario. Embedded LTE modem for backup connectivity.

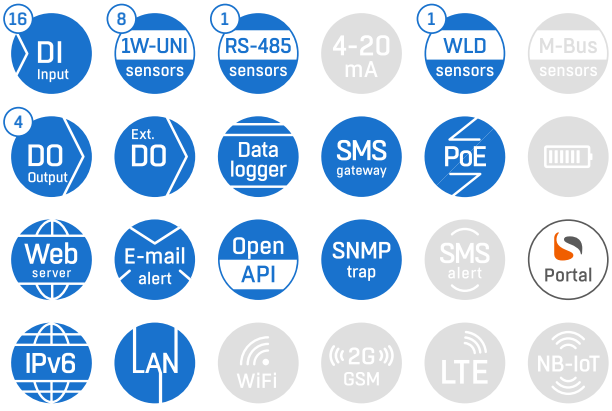
Perseus Monitoring 155 supports up to 100 meters with 1000 variables, connected via 8 1W-UNI (RJ11) ports, 16 DI (Digital Inputs), RS-485 (Modbus/RTU) and one WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT and Modbus/TCP. Perseus Monitoring 155 can control physical relays (4× DO) or remote virtual outputs with local alarms, LUA scripts and Conditions & Actions.

Internal LTE modem provides connectivity backup, as well as SMS and Call alerts.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)

Perseus Monitoring 150



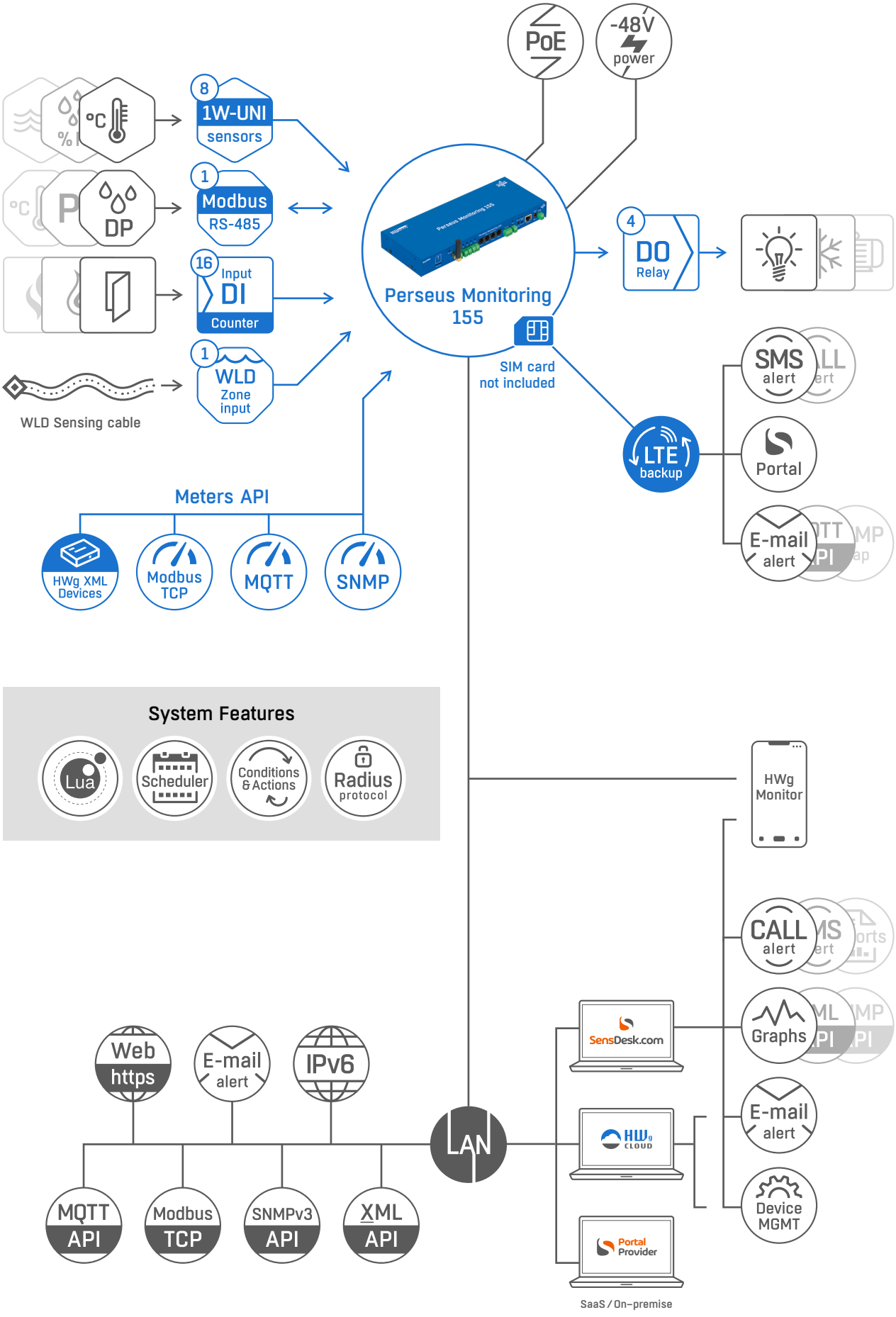


Top-of-the-line LAN solution for any remote monitoring scenario. Can be installed in 19" rack as 1U.

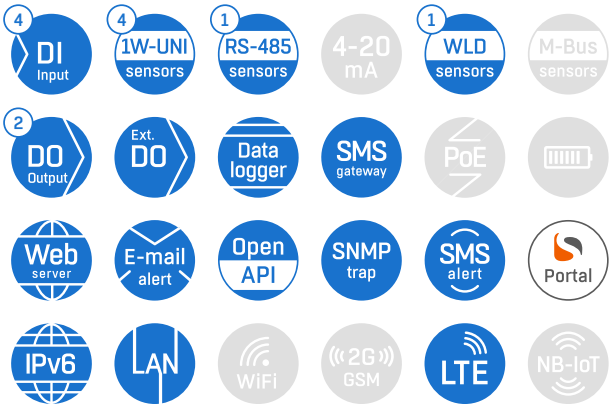
Perseus Monitoring 150 supports up to 100 meters with 1000 variables, connected via 8 1W-UNI (RJ11) ports, 16 DI (Digital Inputs), RS-485 (Modbus/RTU) and one WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT and Modbus/TCP. Perseus Monitoring 150 can control physical relays (4× DO) or remote virtual outputs with local alarms, LUA scripts and Conditions & Actions.

External SMS-GW device can be used for SMS / Call alerting.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)


PoE
-48V power
8 1W-UNI sensors
1 Modbus RS-485
16 Input DI Counter
1 WLD Zone input
WLD Sensing cable
Perseus Monitoring 155
SIM card not included
4 DO Relay
LTE backup
SMS alert
Portal
E-mail alert
Meters API
HWg XML Devices
Modbus TCP
MQTT
SNMP
System Features
Lua
Scheduler
Conditions & Actions
Radius protocol
HWg Monitor
CALL alert
Graphs
E-mail alert
Device MGMT
Web https
E-mail alert
IPv6
LAN
SensDesk.com
HWg CLOUD
Portal Provider
MQTT API
Modbus TCP
SNMPv3 API
XML API
SaaS / On-premise

Perseus Monitoring 145



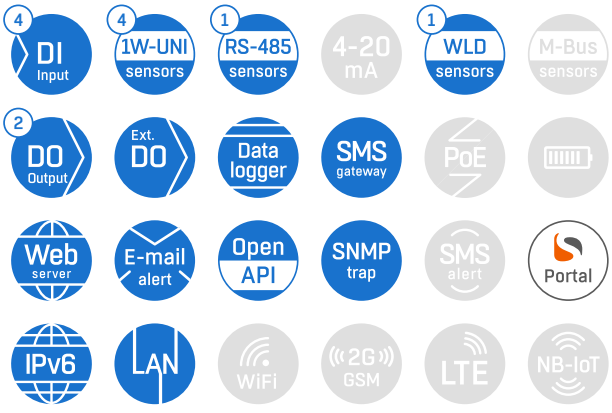
Middle-sized solution for remote monitoring scenario. Embedded LTE modem for backup connectivity.

Perseus Monitoring 145 supports up to 100 meters with 1000 variables, connected via 4 1W-UNI (RJ11) ports, 4 DI (Digital Inputs), RS-485 (Modbus/RTU) and one WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT and Modbus/TCP. Perseus Monitoring 145 can control physical relays (2× DO) or remote virtual outputs with local alarms, LUA scripts and Conditions & Actions.

Internal LTE modem provides connectivity backup, as well as SMS and Call alerts.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)

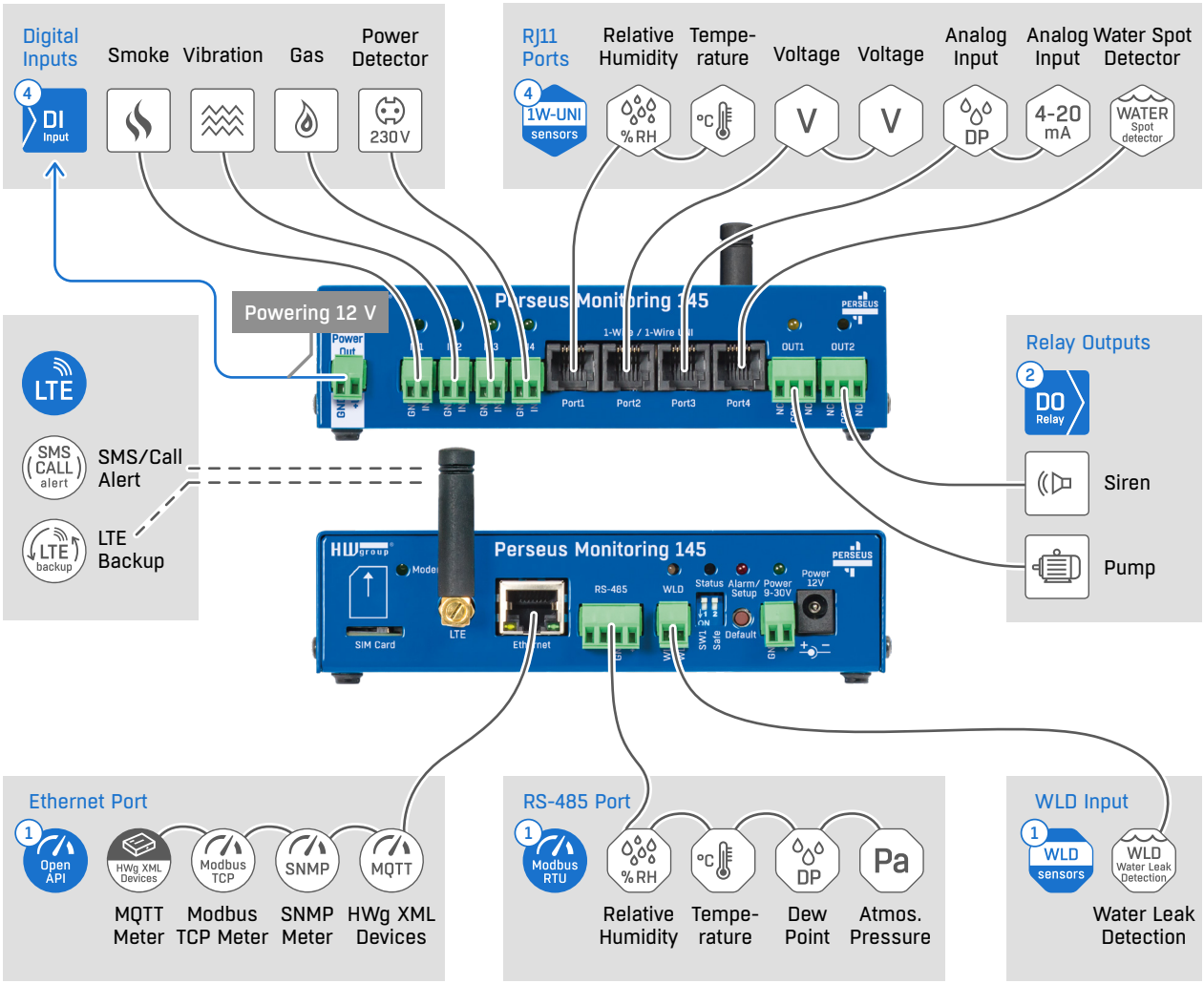
Perseus Monitoring 140



Middle-sized LAN solution for remote environment monitoring.

Perseus Monitoring 140 supports up to 100 meters with 1000 variables, connected via 4 1W-UNI (RJ11) ports, 4 DI (Digital Inputs), RS-485 (Modbus/RTU) and one WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT and Modbus/TCP. Perseus Monitoring 140 can control physical relays (2× DO) or remote virtual outputs with local alarms, LUA scripts and Conditions & Actions.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)



	Perseus Monitoring 155	Perseus Monitoring 150	Perseus Monitoring 145	Perseus Monitoring 140
LTE connectivity backup	✔	-	✔	-
RJ11 ports	8	8	4	4
RS-485 ports (Modbus/RTU)	1	1	1	1
External power for RS-485 sensors	✔	✔	✔	✔
DI Inputs	16	16	4	4
DO Outputs (low voltage relays)	4	4	2	2
WLD zones	1	1	1	1

Perseus Energy

A family of products designed primarily to measure energy consumption and savings, and to develop methods to improve the efficiency of heating and cooling systems, including the generation of independent reports for grant schemes.

Perseus Energy 240 is the most affordable LAN monitoring device designed to connect HW group's and 3rd party TCP or Modbus/RTU sensors. Perseus Energy 240 does not have RJ11 ports for physical sensors. A unique feature of the Perseus family is the ability to connect other HWg devices via LAN as external meters. Physical RS-485 supports generic Modbus/RTU meters (R/W). External sensors (meters) and defined variables can be connected to the SensDesk Technology-based portal.

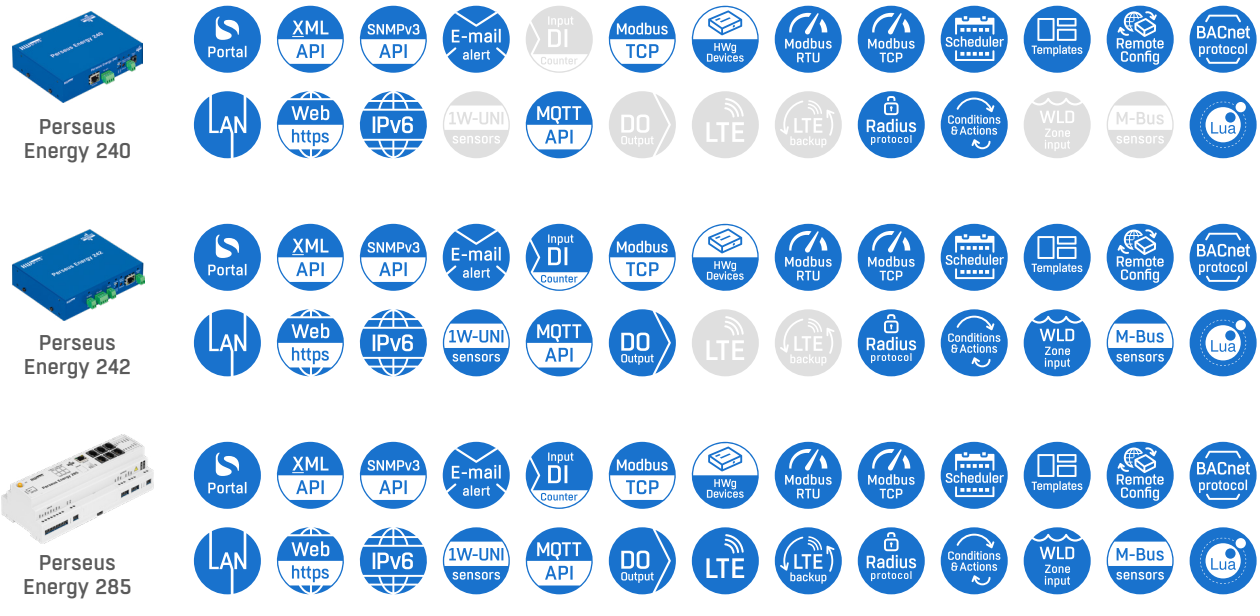
Perseus Energy 242 is the medium-sized LAN device in metal case designed for remote monitoring in energy environment with meters of all kind (electricity, water, gas, heat) connected via Modbus/RTU or M-Bus. In addition, Perseus Energy 242 has 4 RJ11 ports for 1W-UNI sensors, WLD zone input, 2 DI with S0 pulse counters for detectors and 1 DO. Perseus Energy 242 can only be powered from 24V. Therefore, power out terminal block provides 24V.

Perseus Energy 285 is the most powerful device in the Energy family, featuring DI inputs with S0 counters, DO outputs (230V), RJ11 ports, RS-485 (Modbus/RTU), an M-Bus master interface, and a WLD zone input. Perseus Energy 285 combines LAN and LTE connectivity, and is dedicated to the complex monitoring of external physical sensors and energy meters. You can connect electricity, water, gas, and heat meters. Thanks to LTE connectivity, the Perseus Energy 285 offers backup connectivity and built-in SMS and call alerts.

All sensor data is analyzed and processed by the Perseus device. Sensor data can be synchronized with Open API (Modbus/TCP, MQTT, SNMP) or with a user account on the portal (e.g., SensDesk.com). Local conditions, Lua scripting, and a calendar help with measured data processing. Many devices from other vendors, such as electricity meters, UPS, or GenSet, can be connected to Perseus via Modbus/RTU. Data from the Perseus unit is delivered to the SensDesk Technology-based portal. For email alerting, we recommend using the portal – it's faster and more reliable in case of LAN/LTE connectivity combination, and with LAN only, the portal can send a device disconnected alert in case of Internet or power outage. Typical applications include communal and public site monitoring and alerting. Multiple alerting options are supported by Perseus (email, SMS, call, SNMP trap, output switching, etc.), allowing for flexible alert setup.

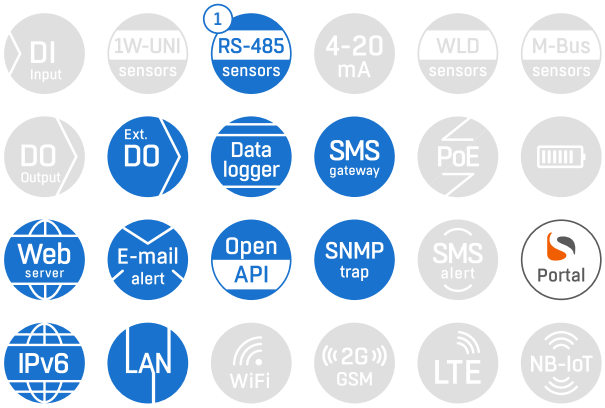
HWg Monitor Mobile App can be used to display the status of all connected meters via LAN directly or via SensDesk Portal.

Features comparison



Perseus Energy 240

Video Flyer

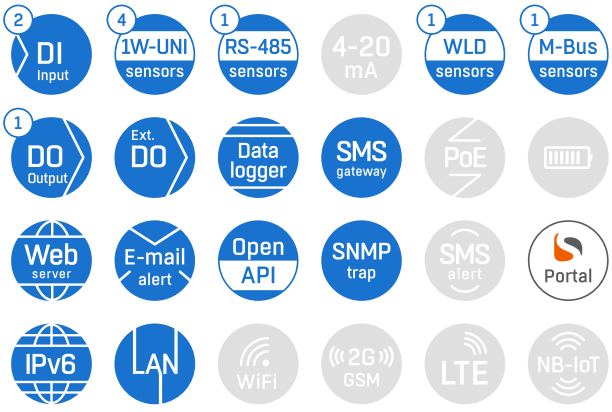


Entry-level LAN solution for connecting 3rd party sensors to the SensDesk Technology-based Portal.

Perseus Energy 240 supports up to 100 meters with 1000 variables, connected via RS-485 (Modbus/RTU). As well as other Perseus units, it can read values from other network devices over HWg XML, SNMP, MQTT and Modbus/TCP. It can control other devices supporting OpenAPI with local alarms, conditions and actions, and LUA scripts.
This unit is perfect for connecting 3rd party RS-485 (Modbus/RTU) sensors at the existing remote monitoring site and sending the data to any of the SensDesk Technology-based Portals.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)

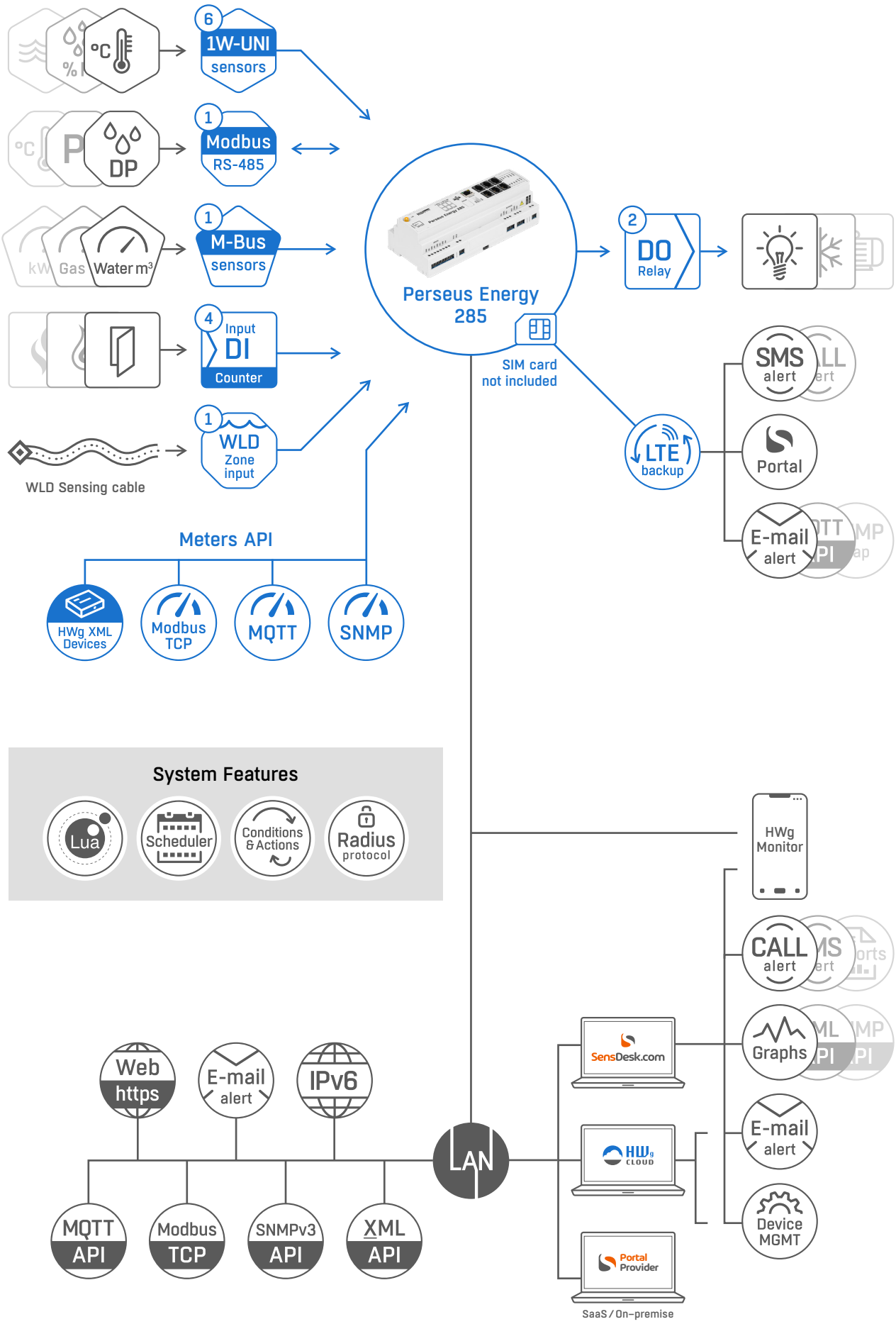
Perseus Energy 242



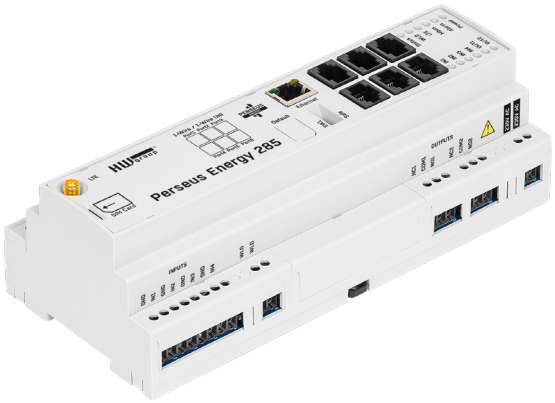
LAN solution in metal case for remote energy monitoring and control applications with M-Bus Master.

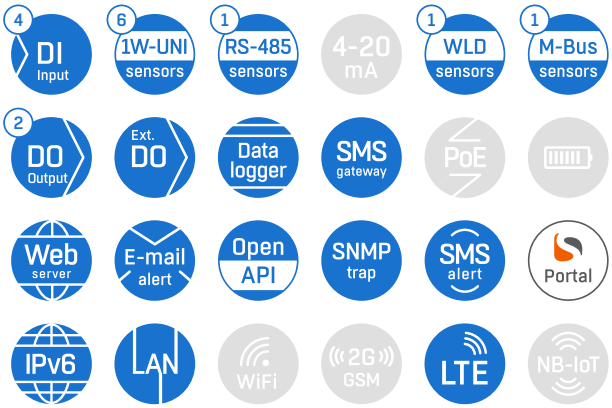
Perseus Energy 242 supports up to 100 meters with 1000 variables, connected via 4 1W-UNI (RJ11) ports, 2 DI (Digital Inputs) with S0 pulse counters, RS-485 (Modbus/RTU) and WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT, Modbus/TCP, additionally reading the data from M-Bus supporting meters, such as electricity, gas, water and other. Perseus Energy 242 can control DO (relay output), and any other device supporting OpenAPI with local alarms, conditions and actions, and LUA scripts.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, M-Bus, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)


6
1W-UNI
sensors
1
Modbus
RS-485
1
M-Bus
sensors
4
Input
DI
Counter
1
WLD
Zone
input
WLD Sensing cable
Perseus Energy
285
SIM card
not included
2
DO
Relay
LTE
backup
SMS
alert
Portal
E-mail
alert
Meters API
HWg XML
Devices
Modbus
TCP
MQTT
SNMP
System Features
Lua
Scheduler
Conditions
& Actions
Radius
protocol
HWg
Monitor
CALL
alert
Graphs
E-mail
alert
Device
MGMT
SensDesk.com
HWg
CLOUD
Portal
Provider
SaaS / On-premise
LAN
Web
https
E-mail
alert
IPv6
MQTT
API
Modbus
TCP
SNMPv3
API
XML
API

Perseus Energy 285



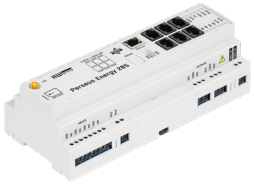


DIN rail LAN and LTE solution for remote energy monitoring and control applications with M-Bus Master.

Perseus Energy 285 supports up to 100 meters with 1000 variables, connected via 6 1W-UNI (RJ11) ports, 4 DI (Digital Inputs) with S0 pulse counters, RS-485 (Modbus/RTU), one WLD (Water Leak Detection) zone. Perseus can read values from other network devices over HWg XML, SNMP, MQTT, Modbus/TCP, additionally reading the data from M-Bus supporting meters, such as electricity, gas, water and other. Perseus Energy 285 can control 2 DO (relay outputs), and any other device supporting OpenAPI with local alarms, conditions and actions, and LUA scripts.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/RTU, Modbus/TCP, M-Bus, NetGSM (SMS-GW), HWg-PUSH (Portal), Radius, Remote Config, BACnet
Meters API	HWg devices XML, SNMP, MQTT, Modbus (RTU & TCP)
Portal	SensDesk Technology (**optional**)

PERSEUS ENERGY



	Perseus Energy 285	Perseus Energy 242	Perseus Energy 240
LTE connectivity	✔	-	-
RJ11 ports	6	4	0
M-Bus master	1	1	0
RS-485 ports	1	1	1
External power for RS-485 sensors	1	1	1
DI Inputs	4	2	0
DO Outputs (low voltage relays)	2	1	0
WLD zones	1	1	0

Standalone Monitoring

Devices with LAN/WiFi/GSM/LTE connectivity. Standalone monitoring products can be used without a portal service. The portal is just an option.

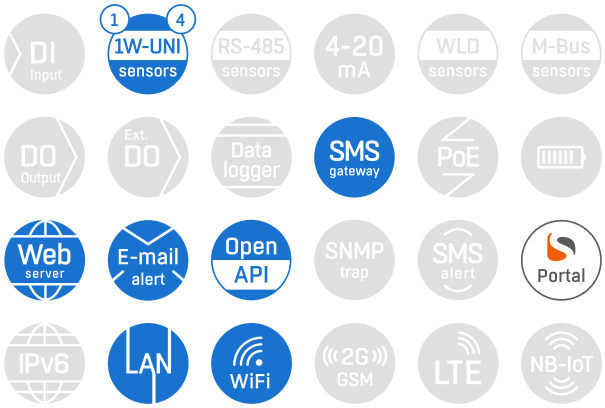
A typical product is a temperature sensor connected to the device, alerting you via email or voice call when the temperature is too low or high. Wide sensor portfolio including temperature, relative humidity, power consumption, water leak detection with sensing cables, voltage and current, CO_2, etc.

- Open APIs: SNMP, XML, Modbus/TCP, MQTT, etc.
- 3rd party software: SCADA, NMS. Portal options: SaaS or on-premise.
- Project design support.

Typical industry segments include IT, electronics, industrial, telecom, pharmaceuticals, food, shipping, transport, hotels/accommodation facilities. Our solutions are often deployed in data centers, BTS sites, factories, warehouses, or pharmacies.

STE2 LITE

Video Flyer



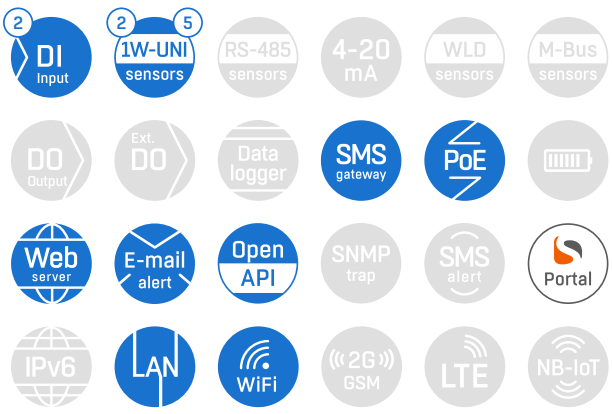
Remote location temperature monitoring with email alerts.

STE2 LITE is a simple-to-use LAN & WiFi thermometer for remote environment measurement. Whenever a temperature exceeds the specified range an e-mail notification is sent. Alerts (Emails) can be sent directly from the device or from the Portal service (also SMS, ring-out, and device-disconnected alerts). Even without Portal service can STE2 LITE send alerts via SMS gateway device.
Even though there is only one RJ11 port, STE2 LITE can be monitoring up to 4 sensor values from external sensors. Including sensors of Relative Humidity, CO_2, VoC, AC/DC current or voltage and others. RJ11 sensors can be daisy-chained or one physical sensor can measure several values (Temperature + Relative Humidity = 2 values).
STE2 LITE device package contains an international 5V power adapter and an external 1m temperature sensor.

Protocols	HTTP(s), XML, SMTP, SNMPv1, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

STE2 R2

Video Flyer



The STE2 R2 package includes an external temperature sensor on a 3m cable and a power adaptor (US, UK, EU). In addition to an external 5V adapter, the STE2 R2 can be powered over Ethernet (PoE).

Additional sensors can be connected to a second RJ11 sensor port, allowing for measurements of relative humidity (%RH), cryo temperatures, CO_2, VoC, AC/DC current or voltage, and others.
There are 2× DI (Digital Input) green terminal blocks for reading the state of ext. detectors (e.g. door contacts).
An alert is sent whenever the temperature is too high/low (door is opened). Alerts, such as emails, can be sent directly from the device using SMTP or from the Portal service. Portal also supports SMS, ring-out, and device-invalid alerts.
Even without the Portal service, the device can send alerts via an external SMS gateway device on the LAN.

Protocols	HTTPs, SNMPv1, HWg-PUSH, XML, NetGSM
Portal	SensDesk Technology (**optional**)

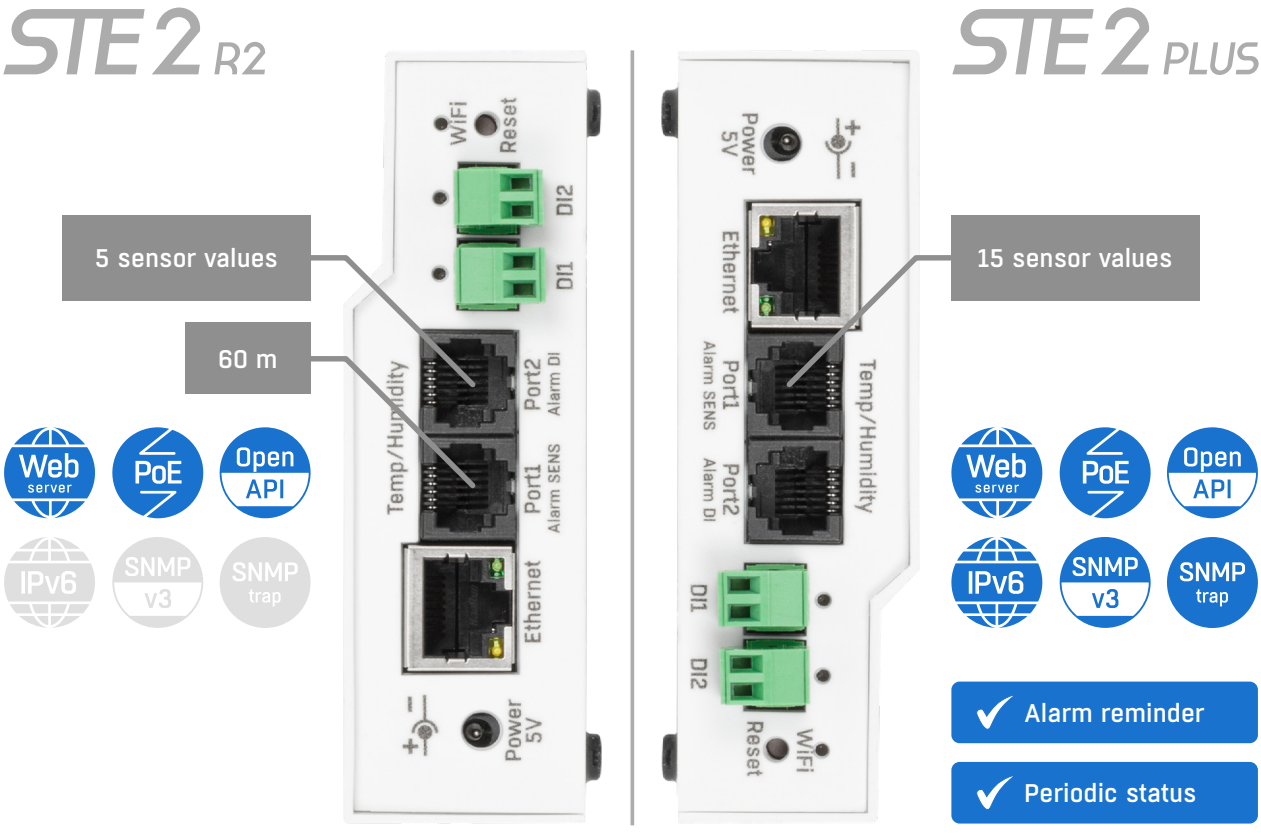
STE2 PLUS

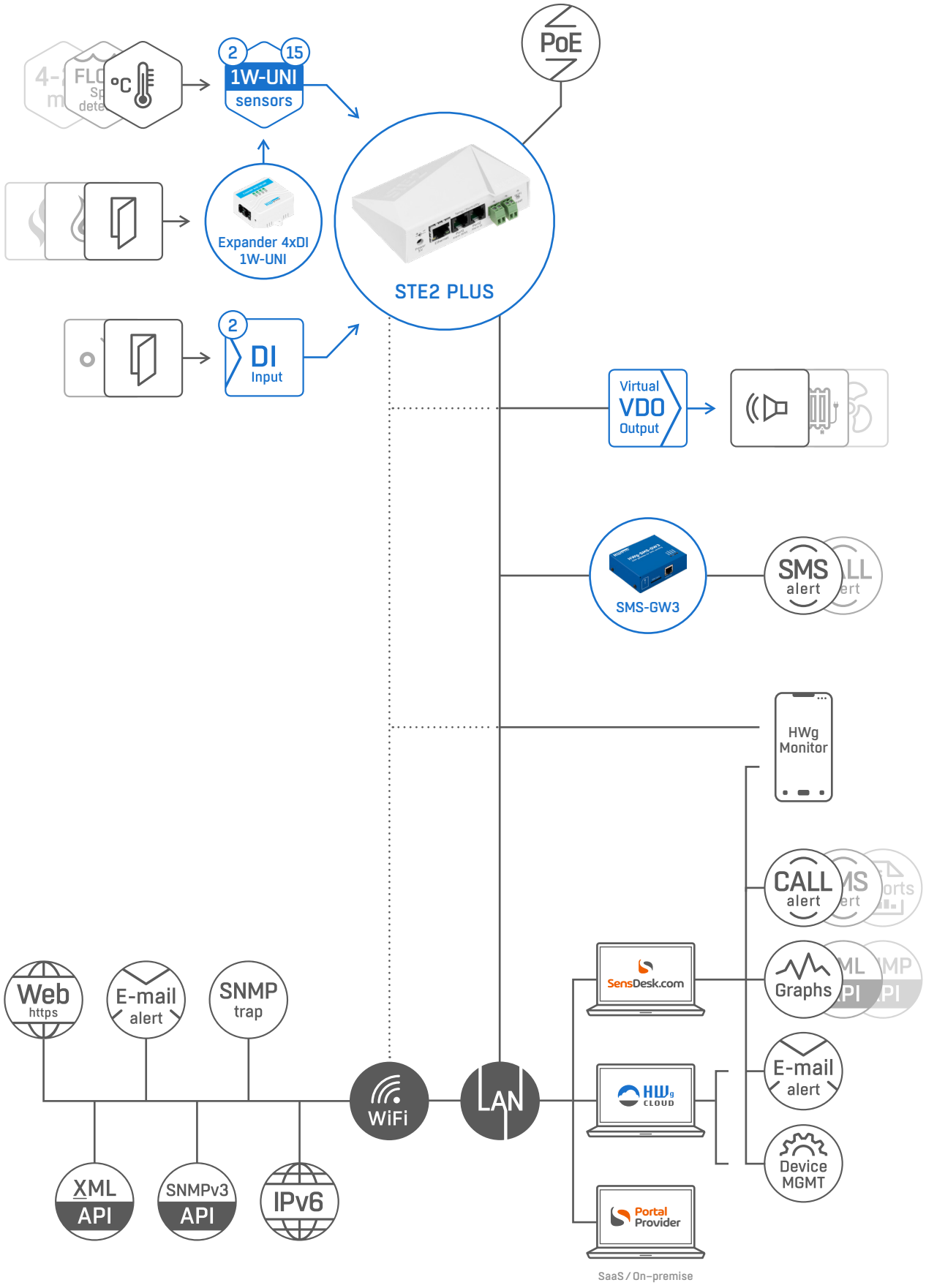
Video Flyer

Professional SNMP thermometer, remote environment monitoring for 15 sensor values.

The STE2 PLUS package includes an external temperature sensor on a 3m cable and a power adaptor (US, UK, EU). Other external sensors can be connected (max. 15 sensor values). One physical sensor can measure multiple values (°C + %RH + VoC = 3 sensor values).
2× DI (Digital Input) green terminal blocks for reading the state of external detectors (e.g. door contacts) or relay outputs.
An alert is sent (via email, SNMP traps, SMS or voice call) whenever the temperature is too high/low (e.g. opened door). For reliable long-term alerting, we recommend using the Portal (SensDesk Technology). However, even without the Portal service, the device can still send alerts via an external SMS gateway device on the LAN.

Protocols	HTTP(s), IPv6, XML, SMTP, SNMPv1/3, SNMP traps, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)




PoE
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1W-UNI
sensors
Expander 4xDI
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STE2 PLUS
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Virtual
VDO
Output
SMS-GW3
SMS
alert
HWg
Monitor
CALL
alert
Graphs
E-mail
alert
Device
MGMT
SensDesk.com
HWg
CLOUD
Portal
Provider
SaaS / On-premise
Web
https
E-mail
alert
SNMP
trap
WiFi
LAN
XML
API
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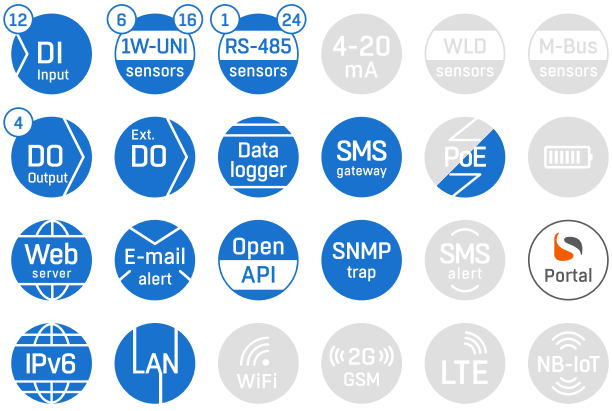
API
IPv6

Poseidon2 4002



Secure solution for remote environment monitoring and control of outputs.

Poseidon2 4002 supports up to 16 sensor values connected over 6 ports 1-Wire / 1-Wire UNI, up to 24 sensors connected over RS-485 and up to 12 detectors connected to digital inputs. Poseidon2 4002 can control 4 digital NO/NC relay outputs, as well as up to 8 virtual digital outputs (VDO) at remote Poseidon2 or Damocles2 units (M2M).
This unit can be used as a standalone device with e-mail alerts, or as a part of a complex monitoring system with SMS alerts sent via a central HWg-SMS-GW3 / SMS-GW3 LTE gateway.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Poseidon2 3468

Remote monitoring and control for industrial applications with 230 V / 16 A relay outputs.

Poseidon2 3468 supports up to 8 sensors connected over 1-Wire / 1-Wire UNI and up to 4 detectors connected to digital inputs. Poseidon2 3468 can control 2 digital 230 V / 16 A relay outputs, as well as up to 8 virtual digital outputs (VDO) at remote Poseidon2 or Damocles2 units (M2M).
In addition to the standard 9–30 V power input, this unit can be powered from -48 V to enable easy use in Telco solutions. The device can be monitored remotely over the internet using any SensDesk Technology based portal.

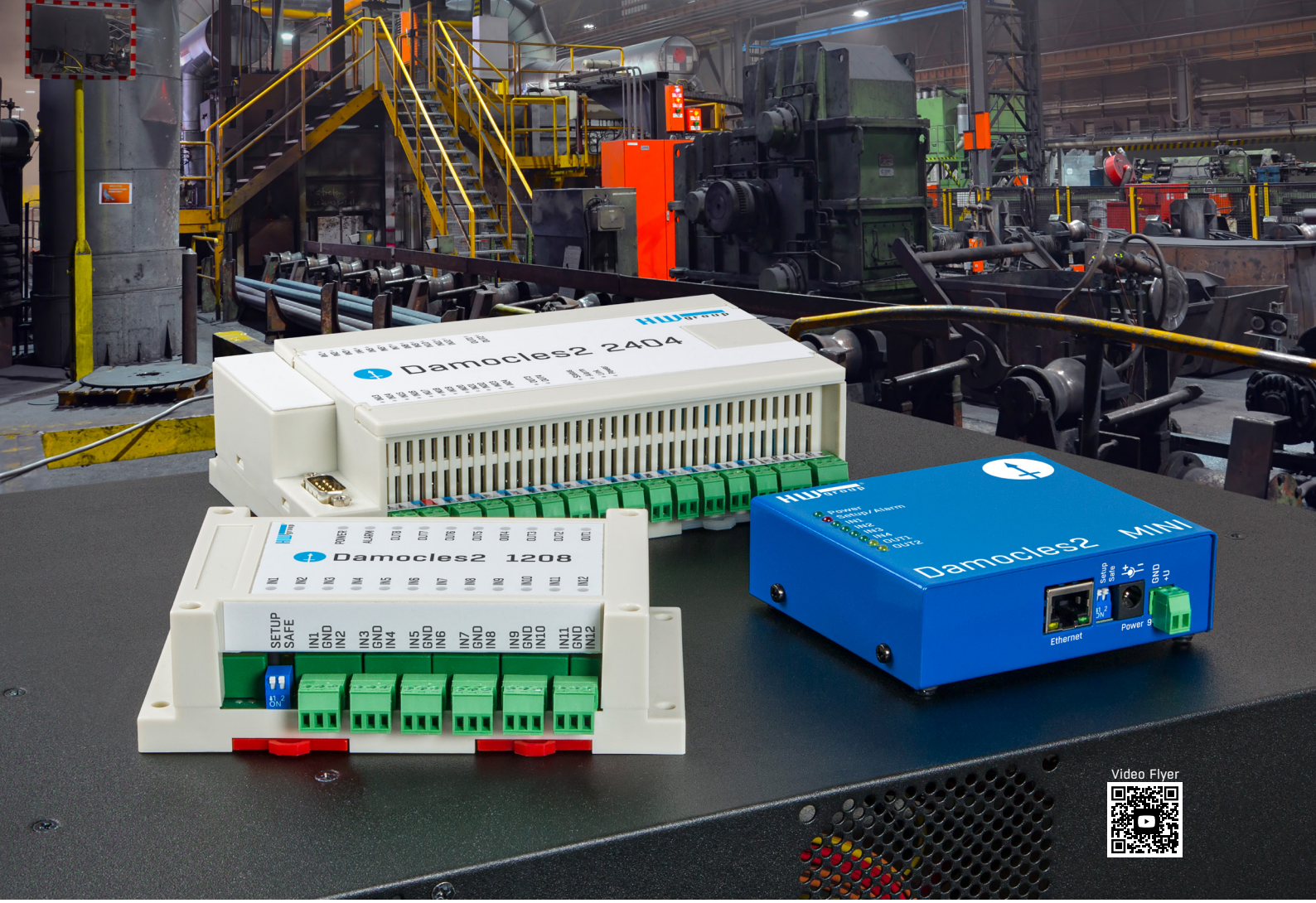
Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Poseidon2 3268

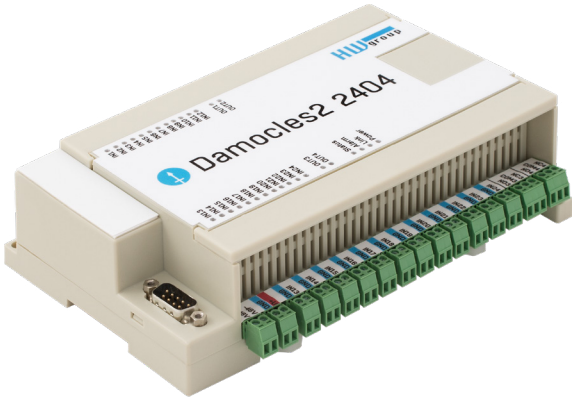
Remote monitoring of sensors and detectors and control of relay outputs.

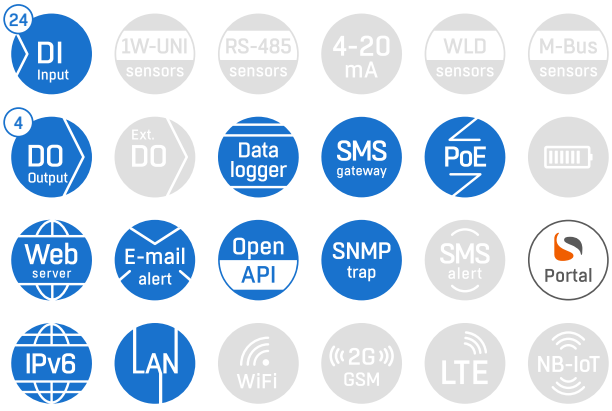
Poseidon2 3268 supports up to 8 sensors connected over 1-Wire / 1-Wire UNI and up to 4 detectors connected to digital inputs. Poseidon2 3268 can control 2 digital NO/NC relay outputs, as well as up to 8 virtual digital outputs (VDO) at remote Poseidon2 or Damocles2 units (M2M).

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)



Damocles2 2404



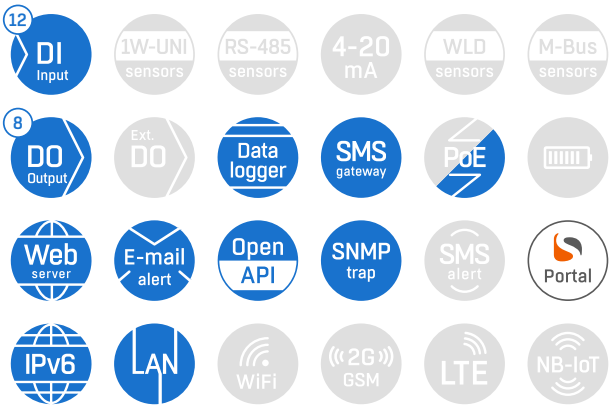


Secure industrial I/O device with PoE and Telco -48 V power options.

Damocles2 2404 supports up to 24 detectors connected to DI (Digital Inputs). Digital Inputs feature S0 pulse counters with power failure memory. Pulse counters are useful for water, gas or electricity meters.
Damocles2 2404 can control 4 DO (Digital Outputs) – NO/NC relays + 8 VDO (Virtual Digital Outputs) at remote Poseidon2 or Damocles2 units (M2M).
This device can be powered from 9–30 V DC or -48 V DC or PoE.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Damocles2 1208

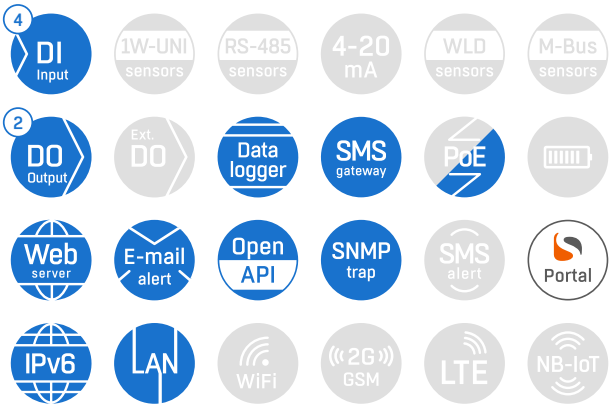


Industrial I/O with enhanced IP security and OC outputs.

Damocles2 1208 supports up to 12 detectors connected to digital inputs. In order to connect meters (such as water, gas or electricity meters), all digital inputs feature S0 pulse counters with memory. Damocles2 1208 can control 8 open collector digital outputs, as well as up to 8 virtual digital outputs (VDO) at remote Poseidon2 or Damocles2 units (M2M).
Damocles2 1208 is an Ethernet I/O device with enhanced IP security and an excellent cost per I/O pin. The device can be monitored remotely over the internet using any SensDesk Technology based portal.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Damocles2 MINI

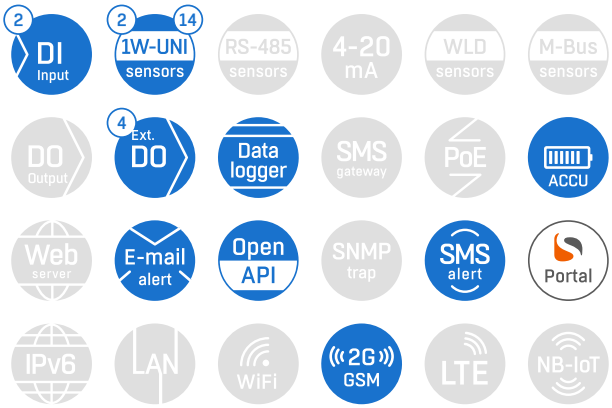


Smart I/O controlled over Ethernet.

Damocles2 MINI supports up to 4 detectors connected to DI (Digital Inputs). Digital Inputs feature S0 pulse counters with power failure memory. Pulse counters are useful for water, gas or electricity meters.
Damocles2 MINI can control 4 DO (Digital Outputs) – NO/NC relays + 8 VDO (Virtual Digital Outputs) at remote Poseidon2 or Damocles2 units (M2M).
Damocles2 MINI is a compact and cost-effective Ethernet I/O device with enhanced IP security. The device can be monitored remotely over the internet using the portal.

Protocols	HTTP(s), IPv6, MQTT, XML, SMTP, SNMPv1/3, SNMP traps, Modbus/TCP, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

HWg-Ares 12



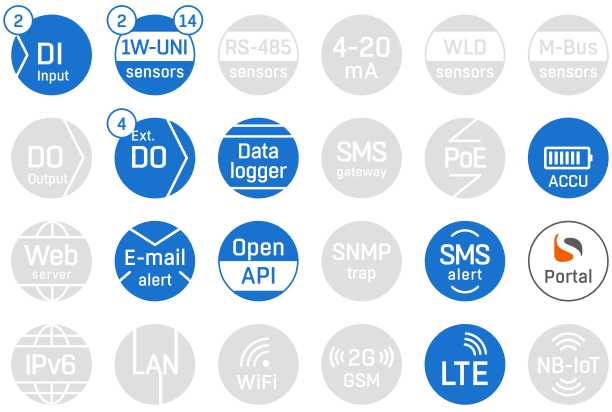
Industrial measuring and monitoring device for 14 sensor values with GSM (2G) communication and back-up power.

HWg-Ares 12 supports up to 14 sensor values connected over 2× RJ11 ports and 2× DI (Digital Input) for detectors.
Both DI ports support S0 pulse counters for connecting meters such as water, gas, or electricity meters. HWg-Ares 12 can be extended with a relay output expansion module connected over the RJ11 ports, which can be used as a thermostat.
The device has an internal rechargeable battery that powers it, along with external sensors, for several hours. It is ideal for locations without LAN access.

Protocols	SMTP, HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Ares 12 LTE

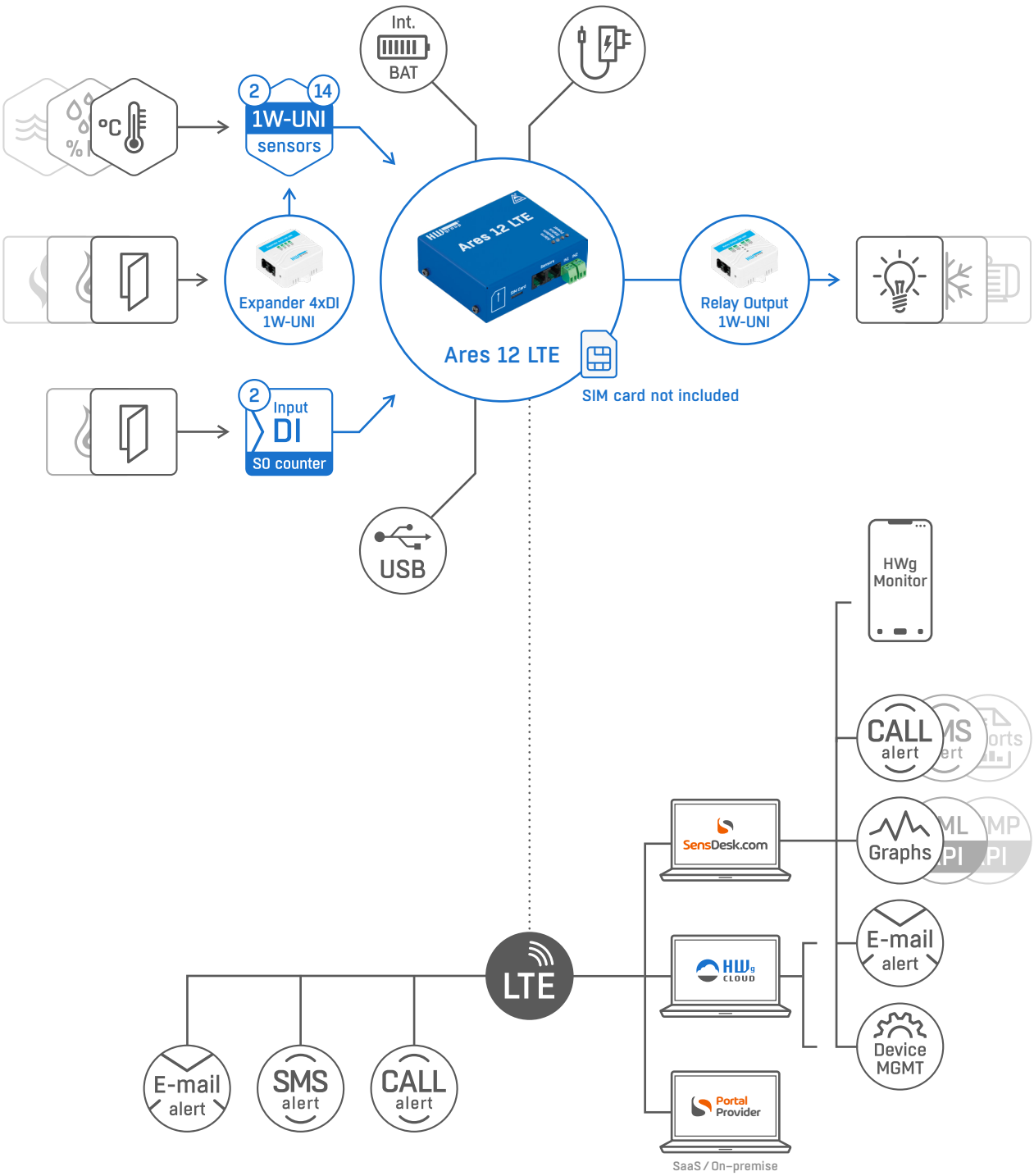
Video Flyer



Industrial measuring and monitoring device for 14 sensor values with LTE communication and back-up power.

Ares 12 LTE supports up to 14 sensor values connected over 2× RJ11 ports and 2× DI (Digital Input) for detectors.
Both DI ports support S0 pulse counters for connecting meters such as water, gas, or electricity meters. Ares 12 LTE can be extended with a relay output expansion module connected over the RJ11 ports, which can be used as a thermostat.
The device has an internal rechargeable battery that powers it, along with external sensors, for several hours. It is ideal for locations without LAN access.

Protocols	SMTP, HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)


Int.
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Ares 12 LTE
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Relay Output
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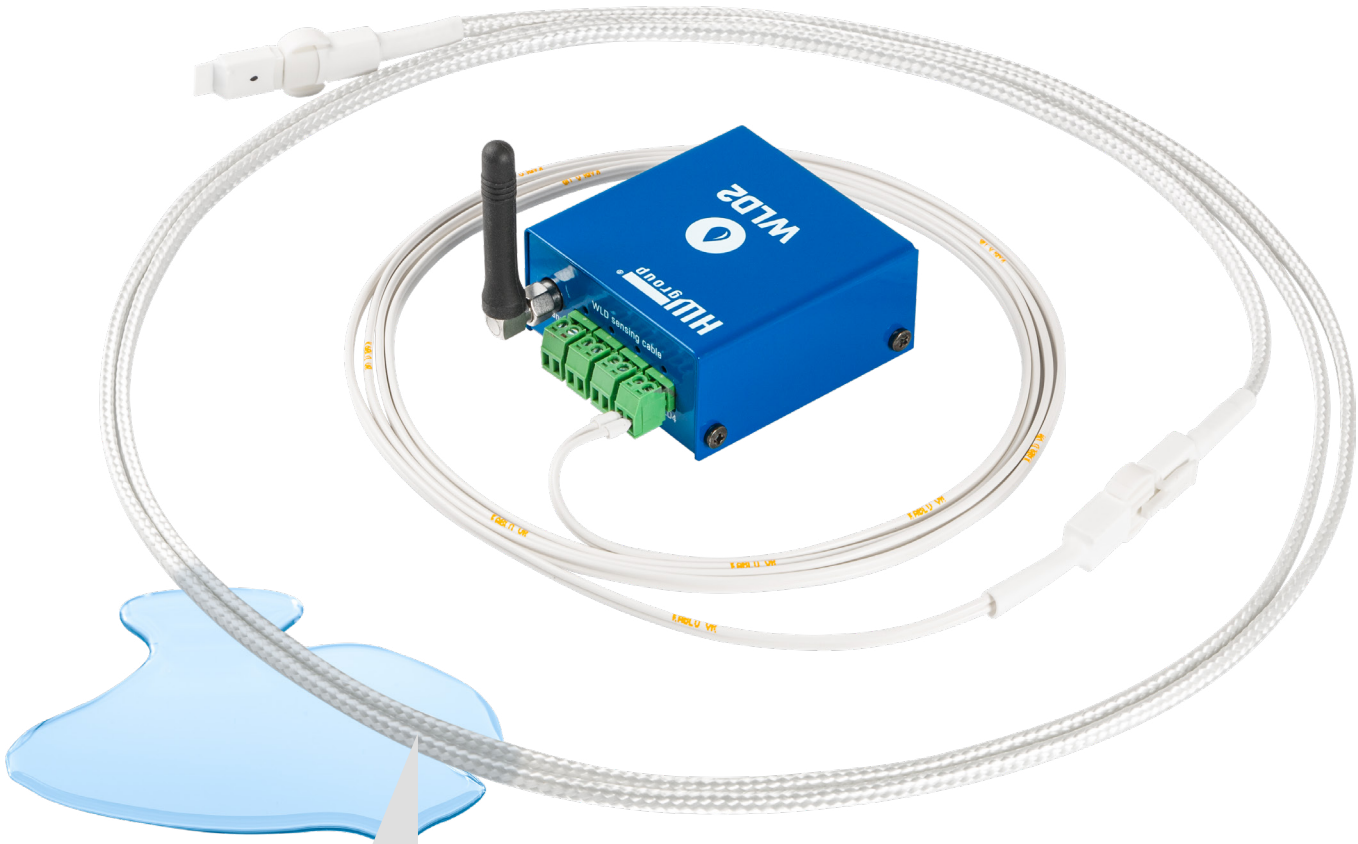
2
Input
DI
S0 counter
USB
HWg
Monitor
CALL
alert
Graphs
E-mail
alert
Device
MGMT
SensDesk.com
HWg
CLOUD
Portal
Provider
SaaS / On-premise
LTE
E-mail
alert
SMS
alert
CALL
alert

Water Leak Detection system

HW group offers several products that provide ideal solutions for flood and water leak detection. WLD system devices use a sensing cable that detects water presence along the entire cable length. See the table below and discover the most suitable device for your scenario.

Video Flyer

	WLD2	NB-WLD	Sensor WLD Relay 1W-UNI
WLD (Sensing cable) Zones	**4** zones	**1** zone	**1** zone
Max. length of WLD sensing cable	**185 m**	**60 m**	**185 m**
Connectivity: NB-IoT	-	✔	-
Connectivity: LAN (RJ45)	✔	-	-
Connectivity: WiFi	✔	-	-
Interface: 1-Wire UNI (RJ11)	-	-	✔
Interface: Relay output (NO/NC)	-	-	✔
SensDesk Portal Connectivity	✔	✔ **(mandatory)**	**Via external device**
Web interface, SMTP	✔	**Via portal**	-



WLD sensing cable is long-term robust solution

Bend

WLD sensing cable Type A is not limited by any bending radius. Sensing cable can be knotted and still works properly.

Grip

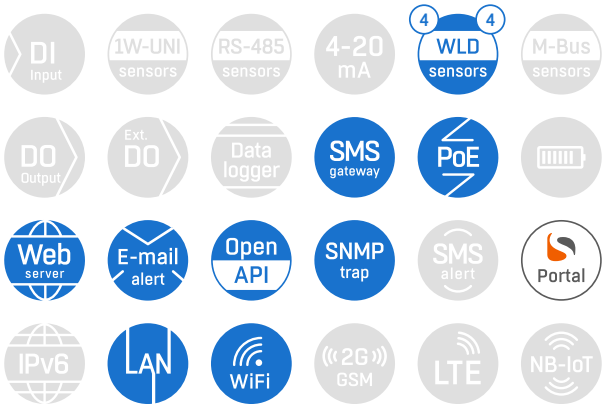
Liquid detection functionality is not limited by point pressure within a reasonable range.

Twist

WLD sensing cable Type A can be twisted as any other electrical cable.

WLD2

Video Flyer



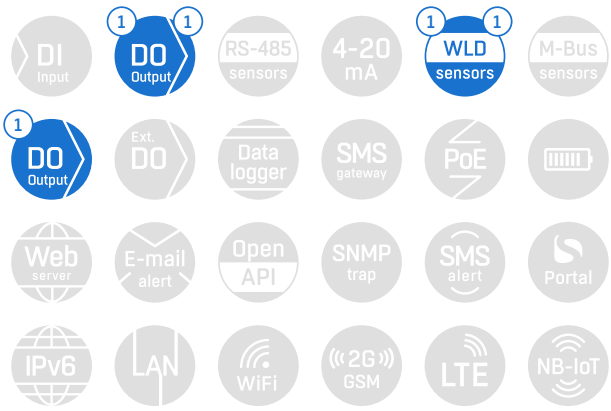
4 zones Water Leak Detector with Ethernet / WIFI.

The WLD2 can detect water in 4 independent zones. By providing early detection and warning, WLD2 can prevent water damage and avoid the associated costs.
It's WiFi or Ethernet connected device powered from external power adaptor or PoE. The WLD sensing cable detects as little as a few drops of liquid and can be also used to detect condensation. Whenever a liquid is detected, the device sends an e-mail or an SNMP Trap. It can also send SMS alert via central SMS gateway (HWg-SMS-GW3 / SMS-GW3 LTE) or SensDesk Technology based portal.

Protocols	HTTP(s), XML, SMTP, SNMPv1, SNMP traps, NetGSM (SMS-GW), HWg-PUSH (Portal)
Portal	SensDesk Technology (**optional**)

Sensor WLD Relay 1W-UNI

Video Flyer



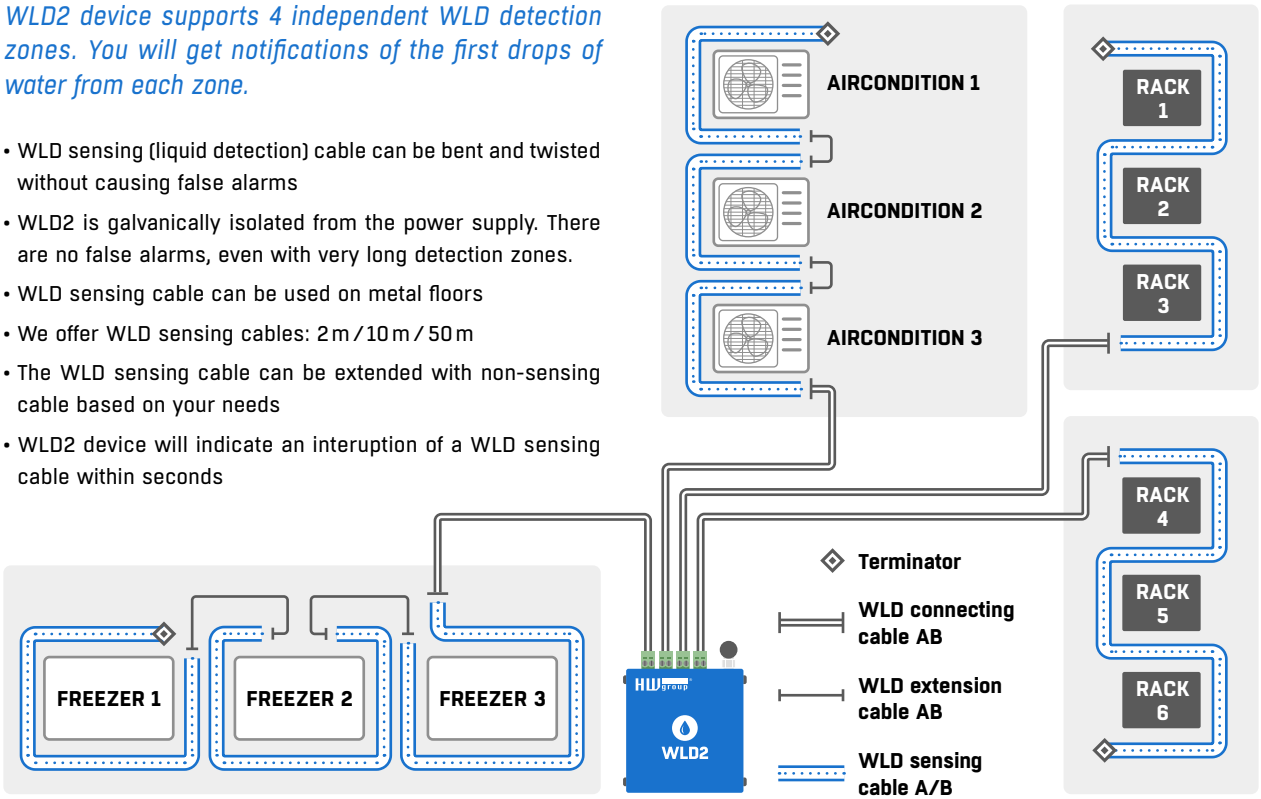
External sensor for connecting WLD water leak sensing cable type A. One WLD sensing zone can be connected to 1W-UNI sensor (RJ11) or to any DI input via this "WLD Relay" device.

Sensor WLD Relay 1W-UNI can be used as a standalone WLD sensor (power + relay output) or as a 1W-UNI sensor connected to any STE2 family, Poseidon2, Ares or other HWg device.
One zone of external WLD sensing cable type A detects as little as a few drops of a liquid along the entire length of WLD sensing cable. Liquid detection is indicated on the 1W-UNI sensor or by switching of the relay NO/NC output (external power 12V is required). By providing an early detection and warning, Sensor WLD Relay 1W-UNI can prevent damages and avoid the associated costs even at places without Ethernet connectivity.

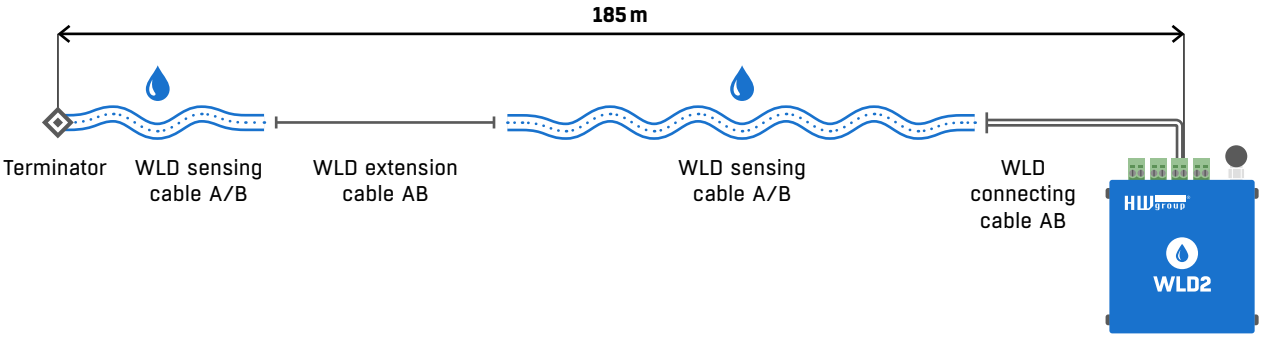
WLD sensing cable is long-term robust solution

WLD2 device supports 4 independent WLD detection zones. You will get notifications of the first drops of water from each zone.

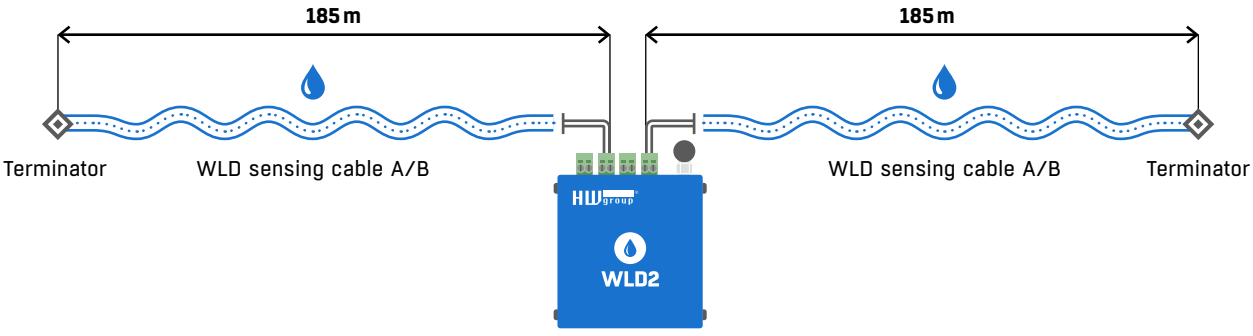
- WLD sensing (liquid detection) cable can be bent and twisted without causing false alarms
- WLD2 is galvanically isolated from the power supply. There are no false alarms, even with very long detection zones.
- WLD sensing cable can be used on metal floors
- We offer WLD sensing cables: 2 m / 10 m / 50 m
- The WLD sensing cable can be extended with non-sensing cable based on your needs
- WLD2 device will indicate an interuption of a WLD sensing cable within seconds

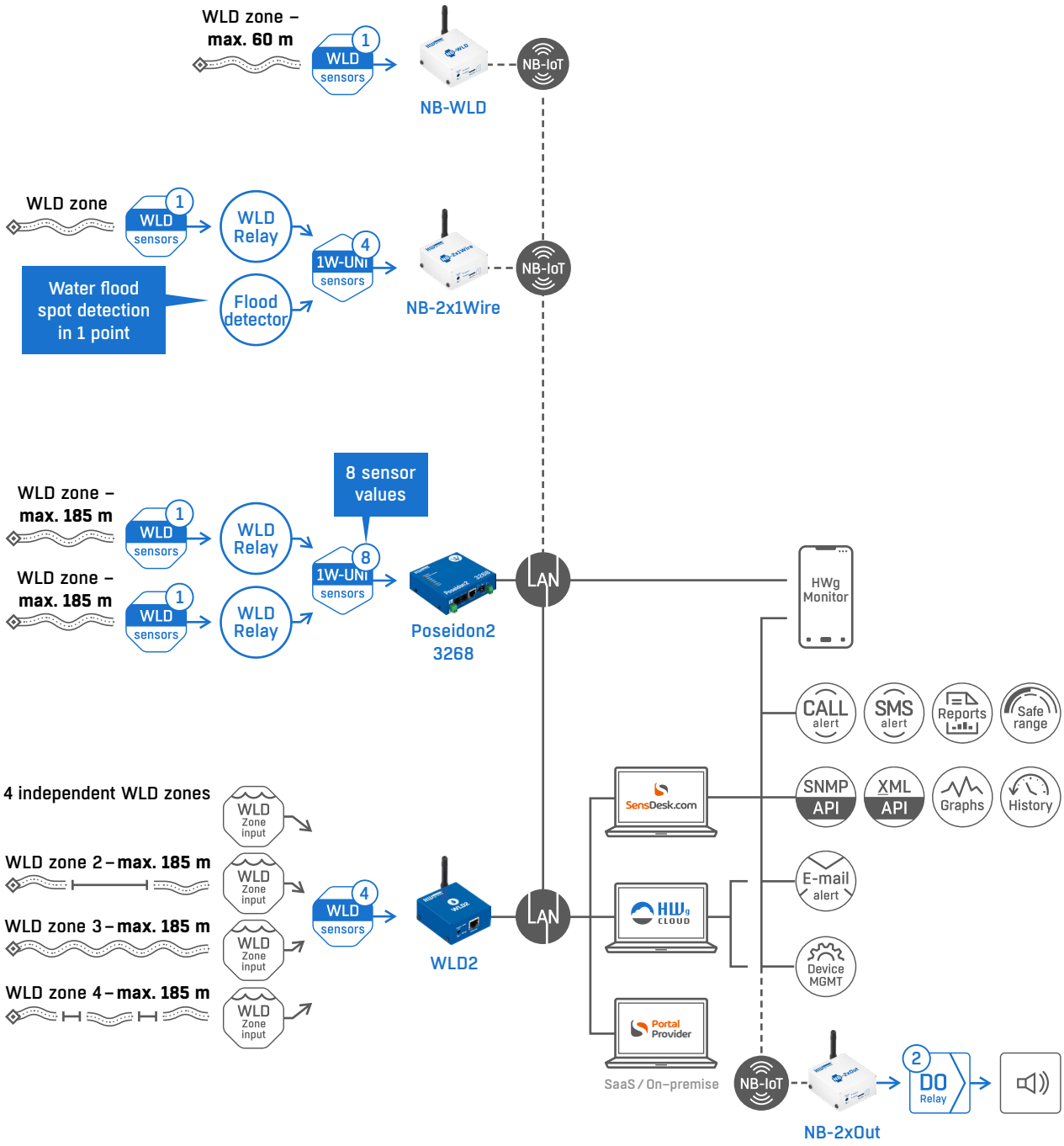


1 Water Leak Detection zone

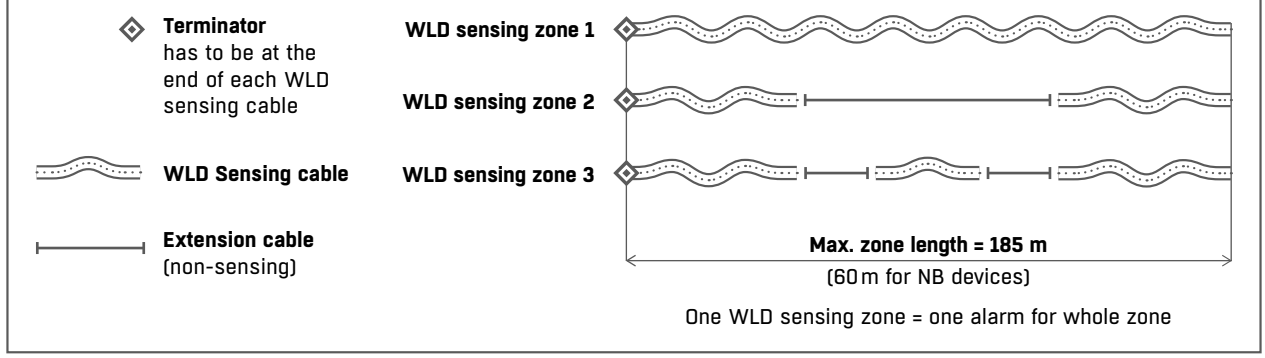


2 independent Water Leak Detection zones





Water Leak Detection (WLD) along the entire cable length



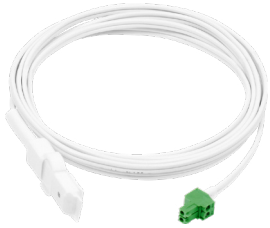
WLD components

WLD sensing cable A 2m / 10m / 50m

WLD sensing cable type A. Water is detected along the entire length of the WLD sensing cable.

WLD sensing cable B 2m / 5m / 10m / 50m

WLD sensing cable type B. Water is detected along the entire length of the WLD sensing cable.



WLD connecting cable AB

2m connection cable for connecting the WLD sensing cable with WLD zone input on any active device. WLD terminator included.

NB-WLD

1× Water Leak Detection zone (sensing cable) to the portal. Internal battery, NB-IoT cellular network connectivity, portal required.

WLD2

WLD2 is a WiFi / Ethernet water leak detector with support for WWW, SNMP and PoE. To detect leaking liquids, it uses 4 sensing cables.

Sensor WLD Relay 1W-UNI

A universal WLD (Water Leak Detection) sensor, with one WLD sensing cable input and 2 kind of outputs (1W-UNI sensor and relay output).

WLD extension cable AB

Prolong non-sensitive cable 5m for WLD type A and B.

WLD Cover Strip A-35 5m

Cover strip for WLD sensing cable A.

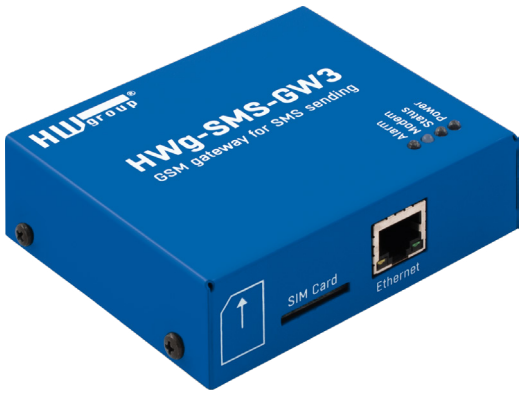
WLD Cover Strip B-30 5m

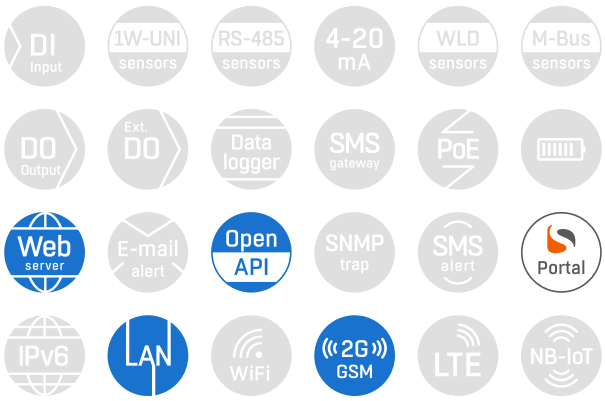
Cover strip for WLD sensing cable B.

WLD Poro Tape 5m

Adhesive tape with holes for attaching WLD sensing cable.

HWg-SMS-GW3





GSM (2G) gateway for sending text messages (SMS) over the Ethernet.

HWg-SMS-GW3 is a central text message (SMS) gateway that HWg devices and applications in the same network can use to dial numbers or send SMS alerts.
Target phone numbers are specified in the sending device setup, defined by SNMP or from 3rd party SW.
The central SMS-GW for all installed HW monitoing devices significantly saves costs of external GSM modems, and the entire installation only needs one SIM card.

Protocols	HTTP, SNMPv1, XML, NetGSM
Portal	SensDesk Technology (can be used for alerting)

SMS-GW3 LTE

SMS-GW3 LTE is a LAN gateway for sending alarm SMS from HW group devices connected to the same LAN.

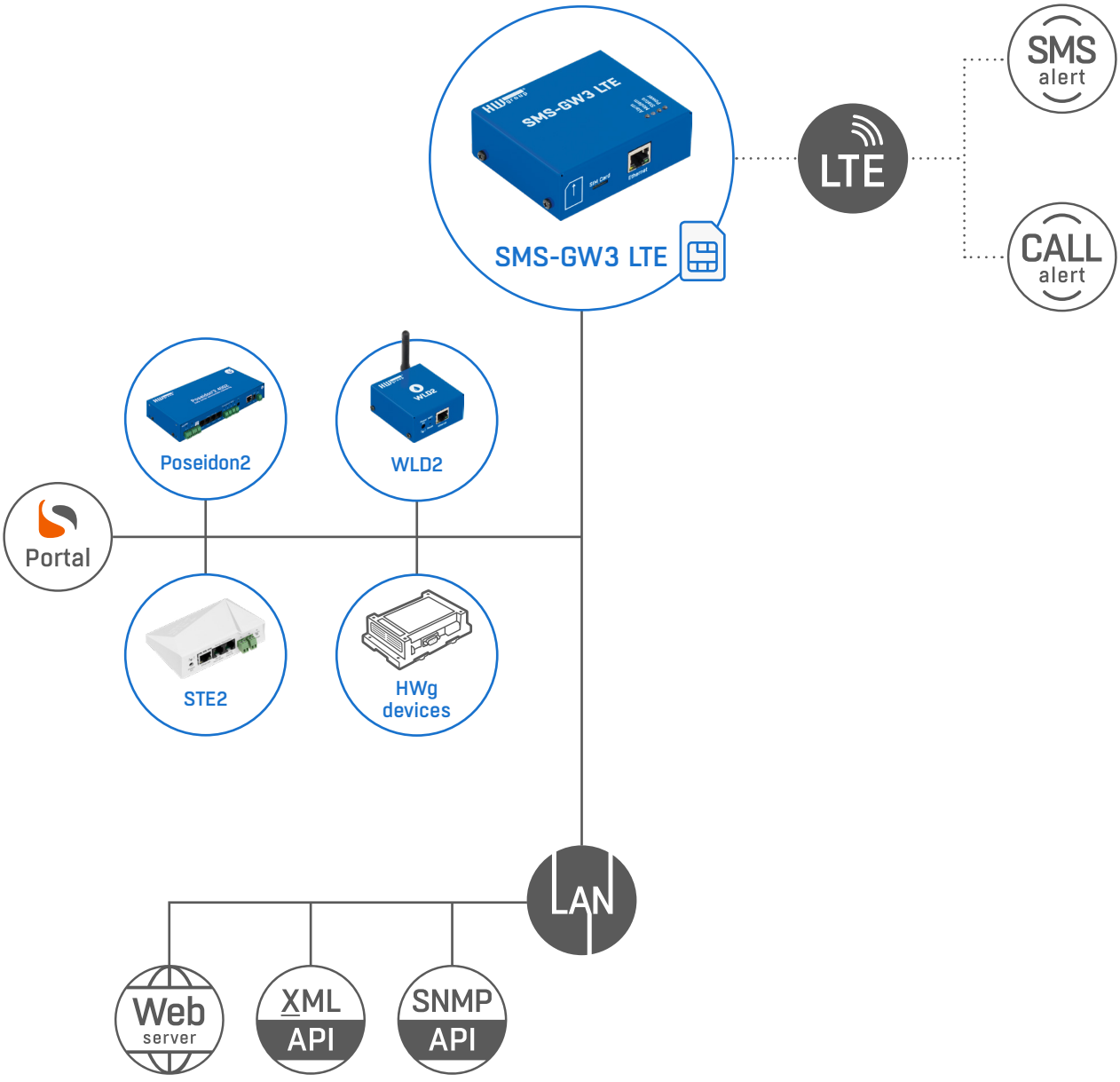
SMS-GW3 LTE is a central gateway that HWg devices and applications in the same network can use to dial numbers or send SMS alerts. Target phone numbers are specified in the sending device setup, defined by SNMP or from 3rd party SW.
The central SMS-GW for all installed HW monitoing devices significantly saves costs of external GSM modems, and the entire installation only needs one SIM card.

Protocols	HTTP, SNMPv1, XML, NetGSM
Portal	SensDesk Technology (can be used for alerting)

GSM/LTE gateway

GSM / LTE gateway is a central device with SIM card connected to the network. All HWg devices (Portal) in the same LAN network can use this central gateway to send SMS alerts or dial voice call alerts. Communication interface is also sufficiently documented for use with 3rd party systems.

GSM / LTE gateway can be used for sending text messages also from on-premise installed Portal (SensDesk Technology), or from SaaS Portal (if GW installed on public IP).

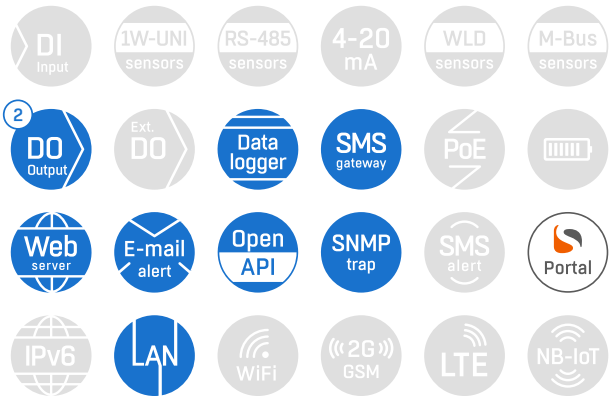


- ✔ One GSM / LTE gateway for all devices on local network.
- ✔ No additional software needed in order to send text messages from the devices.
- ✔ Each device can send its alarm messages to different phone numbers.
  SMS recipient's phone number is configured in the sending device.
- ✔ Supports a "SMS + Ring" function


IP WATCH DOG
HW group
Power
Status
Alarm
Channel 1
Channel 2
IP Watchdog2 Lite
Setup
Safe
GND
+U
Ethernet
IP Watchdog2
Industrial
Channel 1
RS-232
NO
COM
NC
SAFE

IP WatchDog2 Industrial

Video Flyer

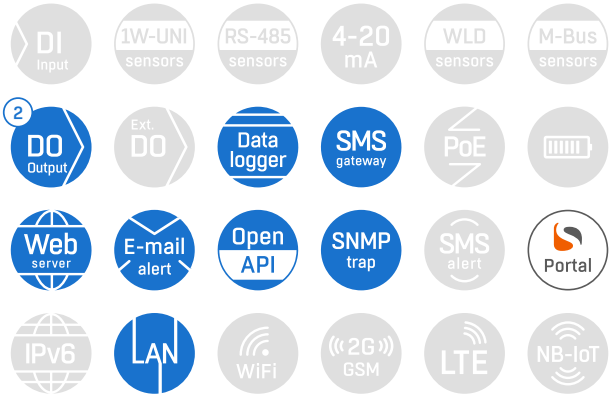


Industrial watchdog that checks devices for heartbeat over the Ethernet and RS-232.

IP WatchDog2 Industrial monitors the correct functioning of devices over LAN (PING / WEB) or serial line (RS-232). When an outage is detected, it reacts by power-cycling or restarting the device using its two output relays. Everything takes place automatically without human intervention. Up to 10 devices can be monitored.
An e-mail or SNMP Trap can be also sent in response to an outage. With a SMS gateway, it can even send you text message alerts.

Protocols	HTTP, SNMPv1, SNMP trap, HWg-PUSH, XML, NetGSM, SMTP
Portal	SensDesk Technology (**optional**)

IP WatchDog2 Lite



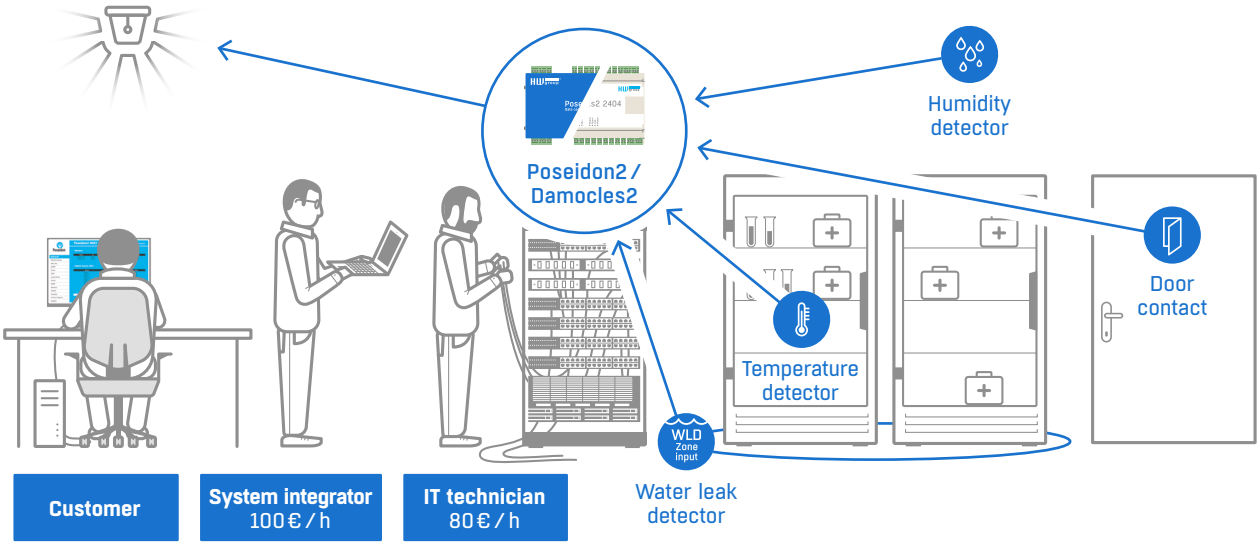
A watchdog that checks devices for heartbeat (PING, WEB) over the Ethernet.

IP WatchDog2 Lite monitors the correct functioning of devices over LAN (PING / WEB). When an outage is detected, it reacts by power-cycling or restarting the device using its two output relays. Everything takes place automatically without human intervention.
Up to 10 devices can be monitored. An email or SNMP Trap can be also sent in response to an outage. With a SMS gateway, it can even send text message alerts thanks to that, when there is a problem, you will always be alerted on time.

Protocols	HTTP, SNMPv1, SNMP trap, HWg-PUSH, XML, NetGSM, SMTP
Portal	SensDesk Technology (**optional**)

Standalone Monitoring

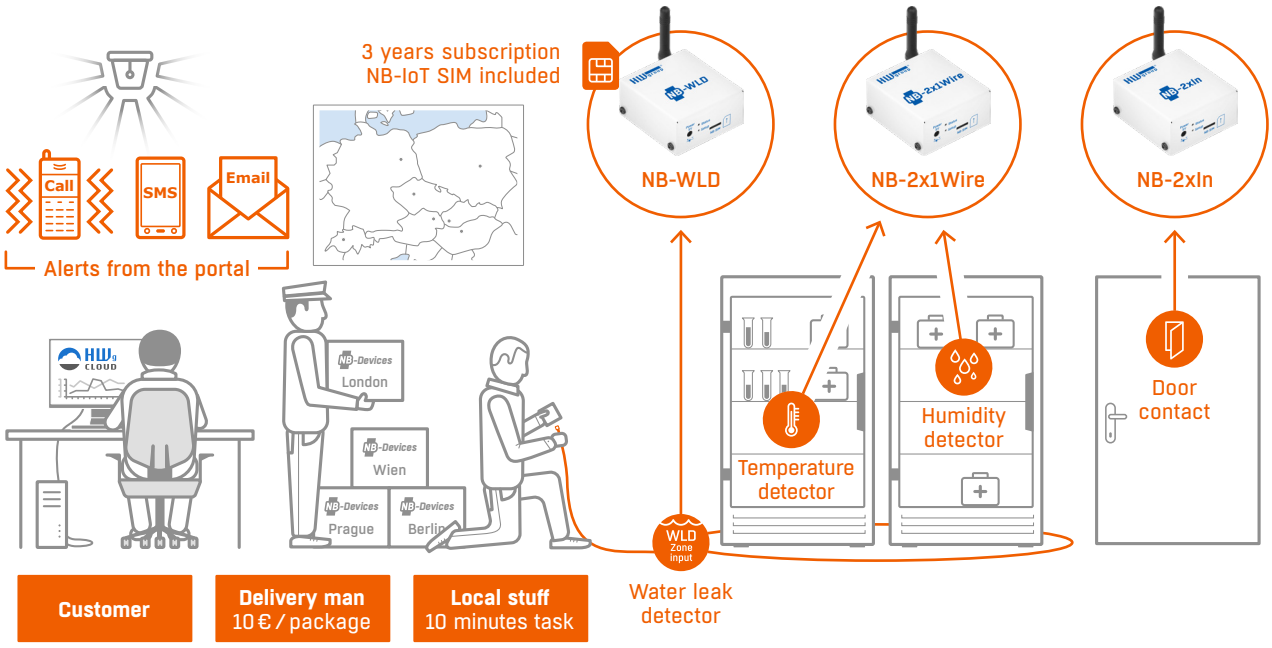
Standalone Monitoring products can be used independently (portal is not required). Devices can send emails and can be connected via SNMP to NMS (Network Monitoring System). Standalone products are multi-purpose, device configuration is more complex and connecting the product to the portal is only one of the functions. Using a central portal does not limit the sending of alarms from the devices and other standalone functions.



	Standalone Monitoring	IoT Monitoring
Installation on the site	Expert	Junior
Device configuration	Device's WEB interface	**Portal only**
Portal connectivity (any SensDesk Technology portal)	Optional	**Mandatory**
Default configured portal	**No portal**	HWg-cloud.com
Open API (SNMP, XML)	**Each device** (5 devices – 5 IP addresses)	**User account** on the portal (5 devices – 1 user account)
Alerting	**Each device** sending alerts by itself	Provided by portal
+ Email alerts	3rd party SMTP server(s) required	Provided by portal
+ SMS / Call alerts	3rd party SIM card (GW device) required	Provided by portal
Central devices management	None / NMS (SNMP) / Portal	**Portal only**

IoT Monitoring

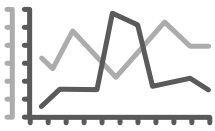
IoT Monitoring devices are very simple (single-purpose) products. Installation is easy, plug in the power supply (insert battery) and stick it to the wall. IoT Monitoring products have to be connected to the portal (HWg-cloud.com for free or any SensDesk Technology portal from Portal Providers).



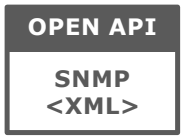
Portal offers you

- ✔ Easy to use Dashboard with whole user account overview
- ✔ Devices or Sensors can be sorted by Locations / Device groups
- ✔ Default Dashboard is simple to use for 3 or even 300 devices

- ✔ Alert voice calls to defined phone number
- ✔ SMS with alert details
- ✔ Compatible with any telephone
- ✔ Included in every SensDesk.com subscription plan



- ✔ Graphs are showing data history
- ✔ MultiGraphs contain several values in one graph
- ✔ Graphs can be included in PDF reports



- ✔ Open API with sensor data from all Sensors & Devices connected to each portal User account
- ✔ All sensor values available in SNMP v1 / v3
- ✔ All sensor values available in XML (over HTTP)
- ✔ Portal can be connected to any other monitoring system

IoT Monitoring

IoT Monitoring devices are designed for easy installation and use, but they rely on a specific Portal. Any portal based on SensDesk Technology can be used for this purpose. You have the option to either install an on-premise server or use an online Software-as-a-Service (SaaS) platform provided by Portal provider (HWg partners), SensDesk.com (paid) or HWg-cloud.com (free of charge). Through the portal, you gain the ability to monitor and control your entire system. Remote FW upgrades, central Alerts management, PDF reports etc.

To simplify device installation, each device comes pre-configured with the HWg-cloud.com portal. Once installed, devices can be effortlessly migrated to any SensDesk Technology-based portal through the portal interface.

Portal is mandatory part of solution with IoT Monitoring devices (SaaS / On-premise).

NB-IoT cellular network

NB Devices

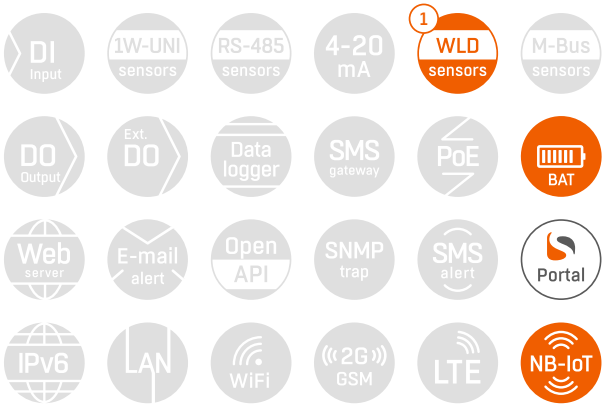
NB-xxx devices are single purpose devices offering connectivity to the NB-IoT (NarrowBand) cellular network. These devices are designed to monitor various external sensors such as temperature, humidity, voltage, WLD detection cable, and DI (Digital Input). The collected data from these sensors is then transmitted to a central portal for further analysis and control.

Monitoring on remote locations can be installed in just a few clicks and you can get your data in minutes. The NB-IoT (NarrowBand) cellular network connected devices can be powered from internal battery for 2 years. 3 years subscription SIM card is included in the standard product version.

Using the NB-xxx devices require SensDesk Technology based portal where you can monitor and control your entire system. Free of charge Portal (HWg-cloud.com) is pre-configured. Devices can be migrated / adopted to any SensDesk Technology based portal.

NB-WLD

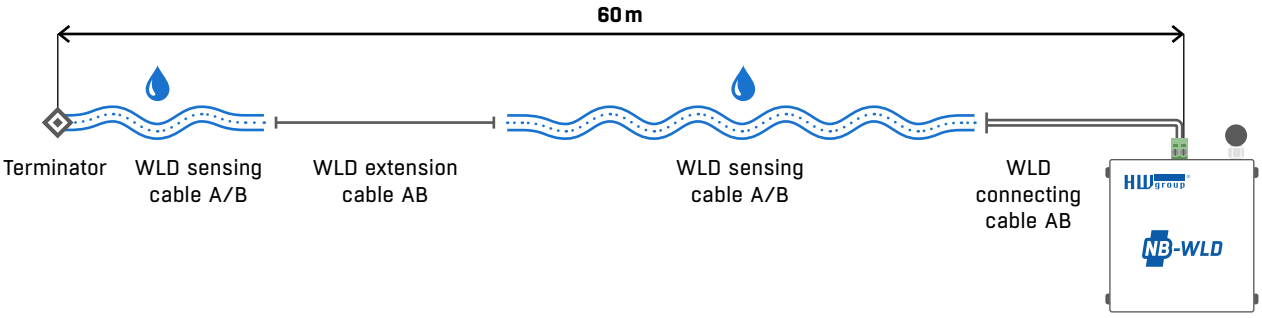
Video Flyer



NB-WLD is a water leak detector with Narrowband IoT connectivity. It uses a very sensitive detection cable.

NB-WLD is a simple device that detects water leaks using a sensing cable A/B. Thanks to early detection and alerting, NB-WLD can prevent substantial damages. It is powered by an internal battery or external power supply.
The device can be monitored and configured remotely using the SensDesk Technology based portal.

Portal	SensDesk Technology (**mandatory**)
Default Portal	HWg-Cloud.com
NB-IoT SIM card	Subscribed version: 3 years SIM included
Battery	Non-rechargeable



Battery inside

Disposable (non-rechargeable) battery is inside of all NB-xxx devices. The battery supplies power to the external sensors / WLD detection cable.

Battery power can alert you to outage of external power (power adaptor). The device continuously indicates the status of the internal battery.
When running on battery power, the device may measure / communicate less frequently. The device can operate on the battery for 1-3 years depending on the configuration of external sensors, ambient temperature and communication parameters with the portal.

NB-2xIn

Video Flyer

An easy to use device with Narrowband IoT connectivity for monitoring of detectors with digital inputs in remote places.

NB-2xIn is a device for connecting door contacts, smoke, gas and motion detectors with a dry contact input. It allows connecting of 2 independent detectors. It is powered by an internal battery or external power supply.
The NB device has to be connected to any SensDesk Technology based portal (SaaS). Manufacturer provides a limited free portal (HWg-cloud.com) as the default pre-configured option.

Portal	SensDesk Technology (**mandatory**)
Default Portal	HWg-Cloud.com
NB-IoT SIM card	Subscribed version: 3 years SIM included
Battery	Non-rechargeable

NB-2xOut

Narrowband IoT device with relay outputs, that can control remote technology manually or based on conditions.

The NB-2xOut device features 2 DO (Relay outputs) that can be easily controlled using the portal. Each output (latching relay) can be controlled manually from the portal or based on alarms from other devices. It is powered by an internal battery or external power supply.
The device has to be connected to any SensDesk Technology based portal (SaaS).
Manufacturer provides a limited free portal (HWg-cloud.com) as the default pre-configured option.

Portal	SensDesk Technology (**mandatory**)
Default Portal	HWg-Cloud.com
NB-IoT SIM card	Subscribed version: 3 years SIM included
Battery	Non-rechargeable

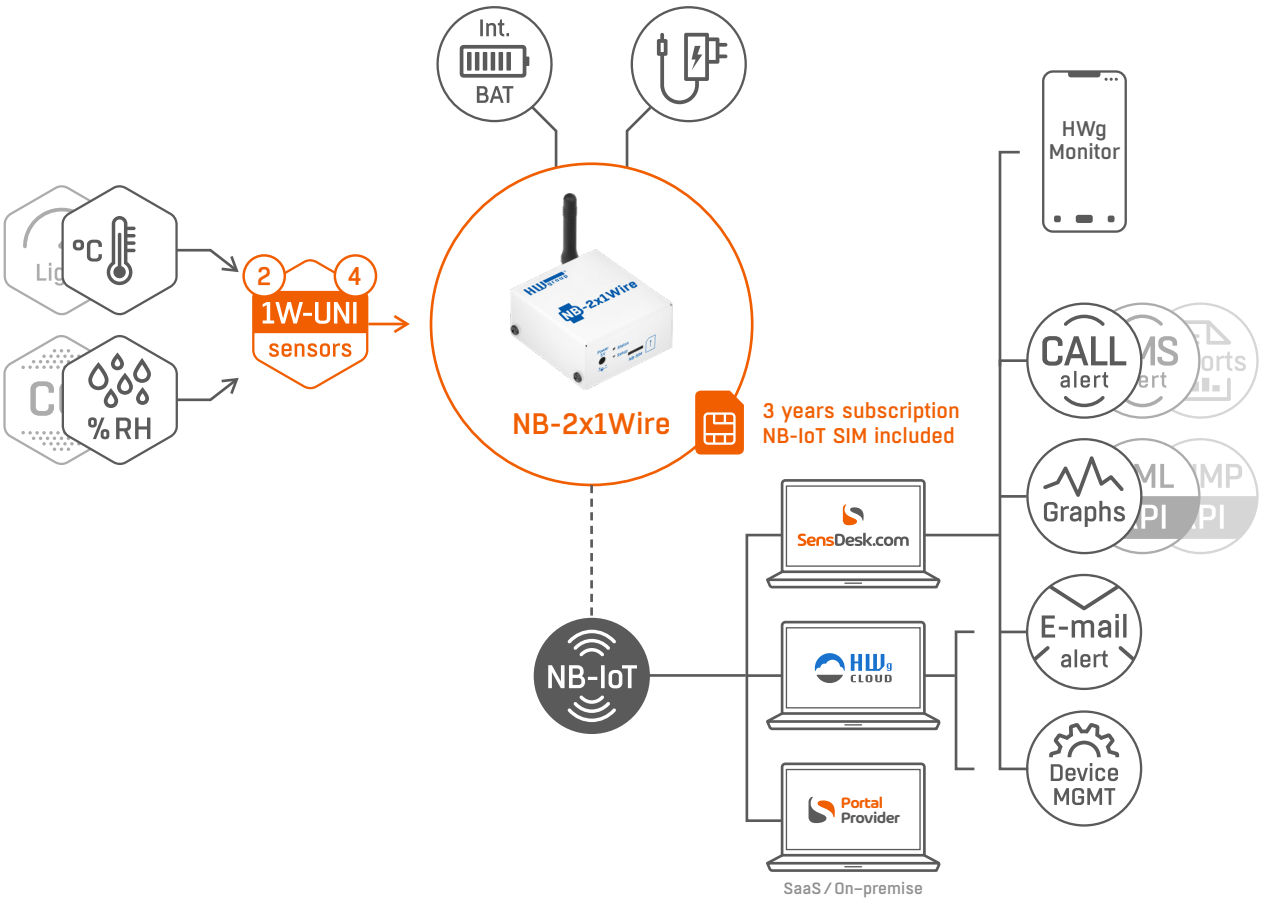
NB-2x1Wire

Video Flyer

A simple device for monitoring of Temperature, Humidity and more in remote places. Narrowband IoT connectivity.

NB-2x1Wire is a device for connecting temperature, humidity or other 1-wire sensors. The device allows connecting sensors in 2 ports with the 1-Wire or 1-Wire UNI bus that can measure up to 4 sensor values. It is powered by an internal battery or external power supply.
The NB device has to be connected to any SensDesk Technology based portal (SaaS). Manufacturer provides a limited free portal (HWg-cloud.com) as the default pre-configured option.

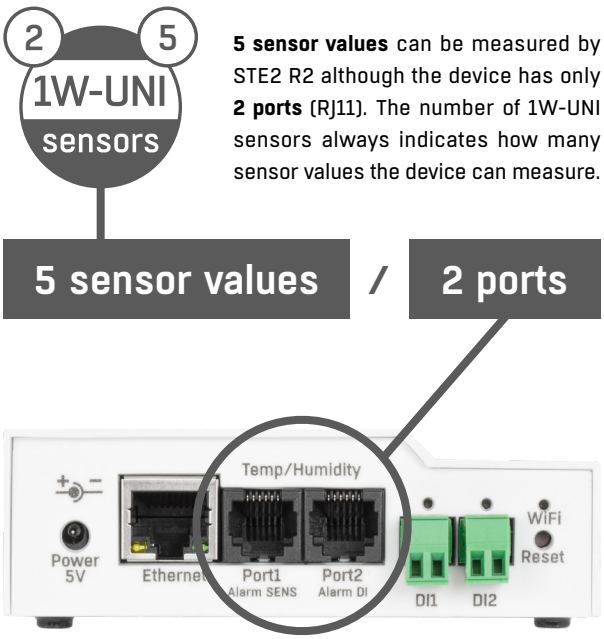
Portal	SensDesk Technology (**mandatory**)
Default Portal	HWg-Cloud.com
NB-IoT SIM card	Subscribed version: 3 years SIM included
Battery	Non-rechargeable



Sensors and Detectors

HW group offers more than 70 precise Sensors and Detectors for every application. The Sensors measure a continuous analog value, use only original accessories from the HW group (except Pt100 ports or 4-20mA industrial sensor Analog Inputs). Any Detector with relay output can be connected to DI (Digital Inputs) ports.

Sensor values



5 sensor values can be measured by STE2 R2 although the device has only **2 ports** (RJ11). The number of 1W-UNI sensors always indicates how many sensor values the device can measure.

1 sensor value
in 1 physical sensor Temp-1Wire (Temperature).

2 sensor values
in 1 physical sensor HTemp-1Wire (Relative Humidity, Temperature).

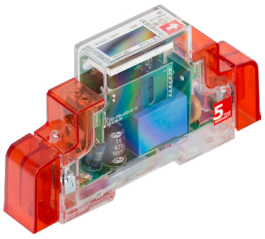
3 sensor values
in 1 physical Sensor CO2 1W-UNI (CO_2, Temperature and Relative Humidity).

M-Bus

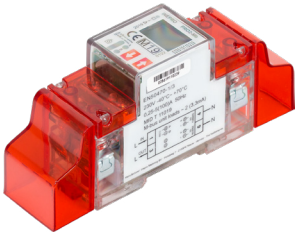
Compatibility: Perseus Energy 285

M-Count 2C
2× pulse input (S0) / M-Bus output

Meter 3f ED 310.DB HWG
3× 230 V/400 V, 63 A



Meter 1f PRO1-Mb 45A M-Bus
Single-phase electricity meter 45A with M-Bus



Meter 1f PRO2-Mb 100A M-Bus
Single-phase electricity meter 45A with M-Bus

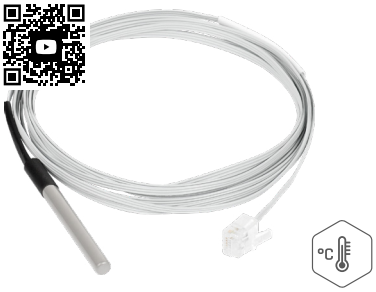
Meter 3f PRO380-Mb x/5A M-Bus
Three-phase electricity meter indirect measurement, MID approved. Pulses & M-Bus data output - 3×230V/400V, 100A.

Meter 3f PRO380-Mb 100A M-Bus
Three-phase 380V M-Bus energy meter for direct measuring (max load 100A). Pulses & M-Bus data output - 3×230V/400V, 100A.

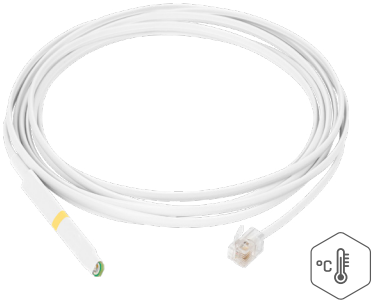
RJ11 (1W-UNI) Sensors

Compatibility: Ares, NB-2x1Wire, Perseus, Poseidon2, STE2

Video Flyer



Temp-1Wire-Flat 3 m
Temperature range: -30 to 60 °C, IP67 rating



Temp-1Wire 3 m calibrated
Temperature range: -10 °C to 80 °C, accuracy: 0.3 °C

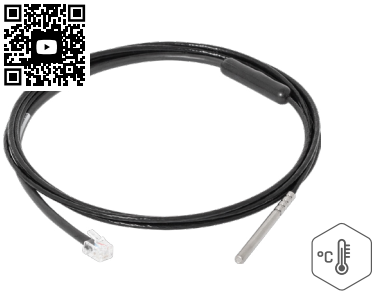
Video Flyer

Temp-1Wire IP67
Temperature range: -10 to 80 °C, IP67 rating, available in 1 m, 3 m, 10 m

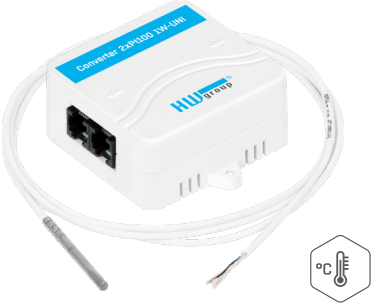
Video Flyer

Temp-1Wire Pt100
Temperature range: -50 to 200 °C, IP67 rating

Video Flyer



Temp-1Wire Pt100 Frost
Temperature range: -200 to 160 °C, IP67 rating



Temp-1W-UNI Pt100 Frost
Temperature range: -190 to 150 °C, Converter 2xPt100 1W-UNI

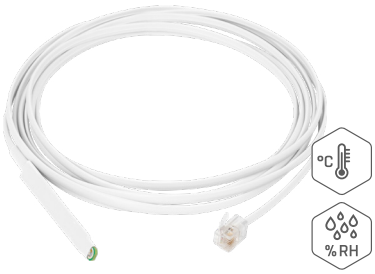
RJ11 (1W-UNI) Sensors

Compatibility: Ares, NB-2x1Wire, Perseus, Poseidon2, STE2

1W-UNI sensors

HTemp-1Wire-Box2

Temperature range: -10 to 80 °C,
humidity range: 0-100 % RH



HTemp-1Wire 3 m

Temperature range: -30 to 80 °C,
humidity range: 0–100 % RH

Temp HomeBox

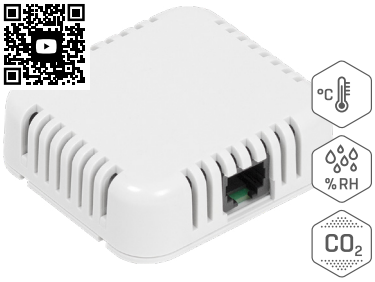
Temperature range: -30 to +70 °C

Video Flyer

HTemp HomeBox

Temperature range: -30 to +70 °C
Humidity range: 0 to 100 % RH

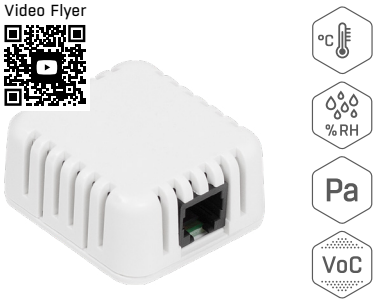
Video Flyer



Sensor CO2 1W-UNI

Temperature range: 0 to +50 °C
Humidity range: 0 to 95 % RH
CO_2 range: 300 to 40 000 ppm

Video Flyer

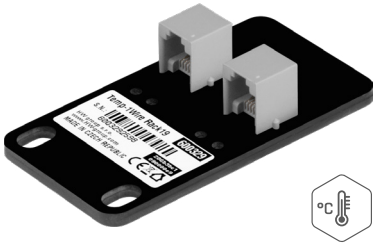


Sensor THPVoc 1W-UNI

Temperature range: -30 to +70 °C
Humidity range: 0 to 100 % RH
Atmospheric range: 30 000 to 110 000 Pa
Air quality range: 0 to 60 000 ppb

Temp-1W-UNI Pt100 Cable

Temperature range: -50 to 200 °C,
Converter 2xPt100 1W-UNI



Temp-1Wire Rack19

Temperature range: -10 °C to 80 °C.
2 RJ12 connectors

HTemp-1Wire Rack19

Temperature range: -10 to 80 °C,
humidity range: 0-100 % RH

HTemp-1Wire Outdoor 3 m

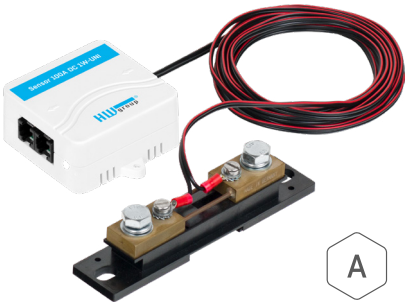
Temperature range: -30 to 85 °C,
humidity range: 0–100 % RH

Humid-1Wire

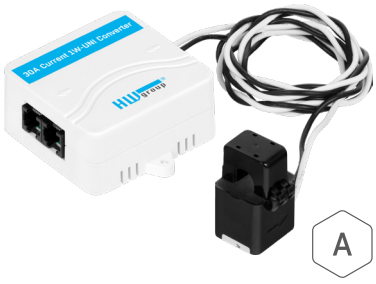
Humidity range: 0-100 % RH, accuracy:
5 % RH, available in 1 m, 3 m, 10 m

30A DC Current Probe 1W-UNI

Current range: 0–30 A DC



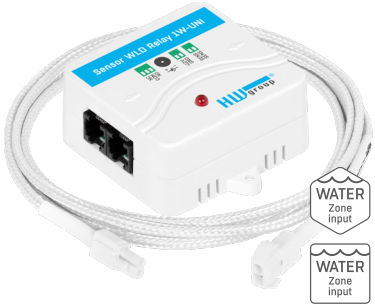
100A DC Current Probe 1W-UNI
Current range: 0–100 A DC



30A Current Probe 1W-UNI 2
Current range: 0–30 A DC

Sensor 4-20 mA 1W-UNI
8-point calibration table

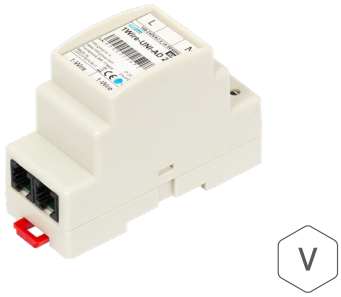
Sensor 0-20 mA 1W-UNI
8-point calibration table



Sensor WLD Relay 1W-UNI
Up to 185 meters of water detection cable

Video Flyer

Flood detector 1W-UNI 3 m
Water flood detection in 1 spot, can be fully submerged



Sensor 230 V AC 1W-UNI
Voltage range: 100–250 V AC

Sensor 60V 1W-UNI v2
Voltage range: 0–60 V DC

Video Flyer

UPS 12 V and 5 V
Status info (1-Wire UNI / relay), 1,3 Ah

RJ11 (1W-UNI) Converters

Compatibility: Ares, NB-2x1Wire, Perseus, Poseidon2, STE2

Expander 4xDI 1W-UNI
4× digital inputs on 3 m cable

Converter 2xPt100 1W-UNI
External temperature probe from -200 to +850 °C, 8-point calibration table

Relay Output 1W-UNI
4× relay output, supported only by HWg-Ares12 and Ares 12 LTE

RS-485 Sensors

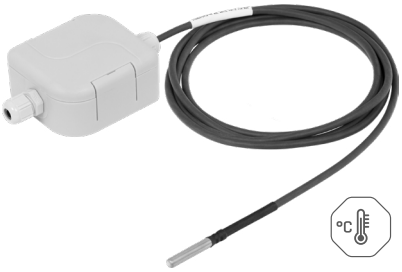
Compatibility: Poseidon2 4002

HTemp-485 T3411
Temperature range: -30 to 80 °C,
Humidity range: 0–100 % RH,
Dew Point range: -60 to 80 DP °C

HTemp-485 T3419
Temperature range: -30 to 105 °C,
Humidity range: 0–100 % RH,
Dew Point range: -60 to 80 DP °C

HTemp-485 Box2
Temperature range: -10 to 70 °C,
Humidity range: 0–100 % RH

Temp-485-Pt100 Box2
Temperature range: -30 to 70 °C,
IP65 rating



Temp-485-Pt100 Cable3
Probe temperature range:
-50 to 200 °C

Temp-485-Pt100 Frost2
Probe temperature range:
-190 to 150 °C

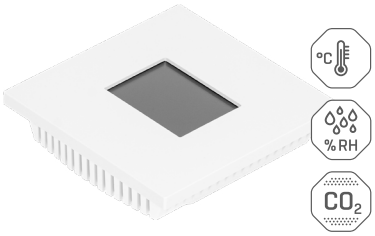
Temp-485 Box2
Temperature range: -10 to 70 °C,
IP23 rating

Spider
4× DI contacts or 4× 1-Wire to
RS-485 bus

Poseidon S-Hub
8× sensors over RJ45

RS-485 RTU (Perseus)

Compatibility: Perseus



HTemp CO2 485-RTU RK-CHM-D
Temperature range: -10 to 50 °C,
Humidity range: 10–95 % RH,
CO_2 range: 400 to 10 000 ppm

PHTemp-485 Modbus RTU T7410
Atmospheric pressure range: 600–1100 Pa
Temperature range: -30 to 80 °C,
Humidity range: 0–100 % RH,
Dew Point range: -60 to 80 DP °C

HTemp-485 Modbus RTU T3419
Temperature range: -30 to 105 °C,
Humidity range: 0–100 % RH,
Dew Point range: -60 to 80 DP °C

Detectors connect to DI

Compatibility: Ares, Damocles2, NB-2xIn, Perseus (except Energy 240), Poseidon2, STE2

DI Input

Door Contact MK4
3 m connection wiring

Motion PIR Detector
Recommended installation height: 2.5 m, detection range: 120° / 12 m

Optical Smoke Detector FDR26
Covered space: 40 m², max. height 7 m

Video Flyer

Power Detector
110 / 230 V voltage,
relay output (max. 50 V / 130 mA)

PowerEgg2
110/230 V single phase, max. load 8A

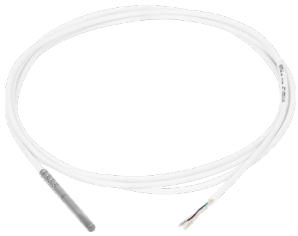
Gas Leak Detector
2 optional reactions

Vibration Detector SS14-v2
IP23 rating

Video Flyer

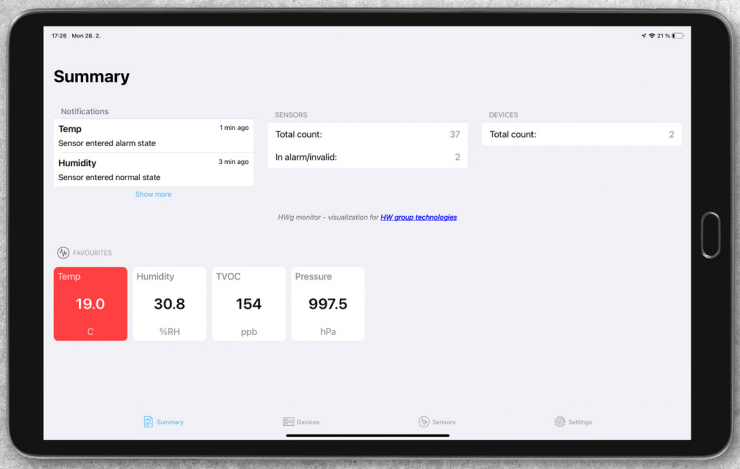
UPS 12 V
Status info (relay), 1,3 Ah

Accessories

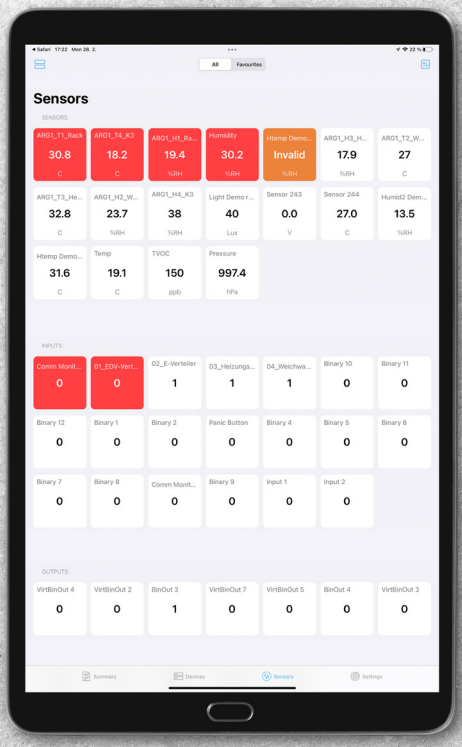


Probe Pt100 TR125 2 m
Temperature range: -190 to 150 °C,
IP67 rating

Probe Pt100 TG8 2 m
Temperature range: -50 to 200 °C,
IP67 rating



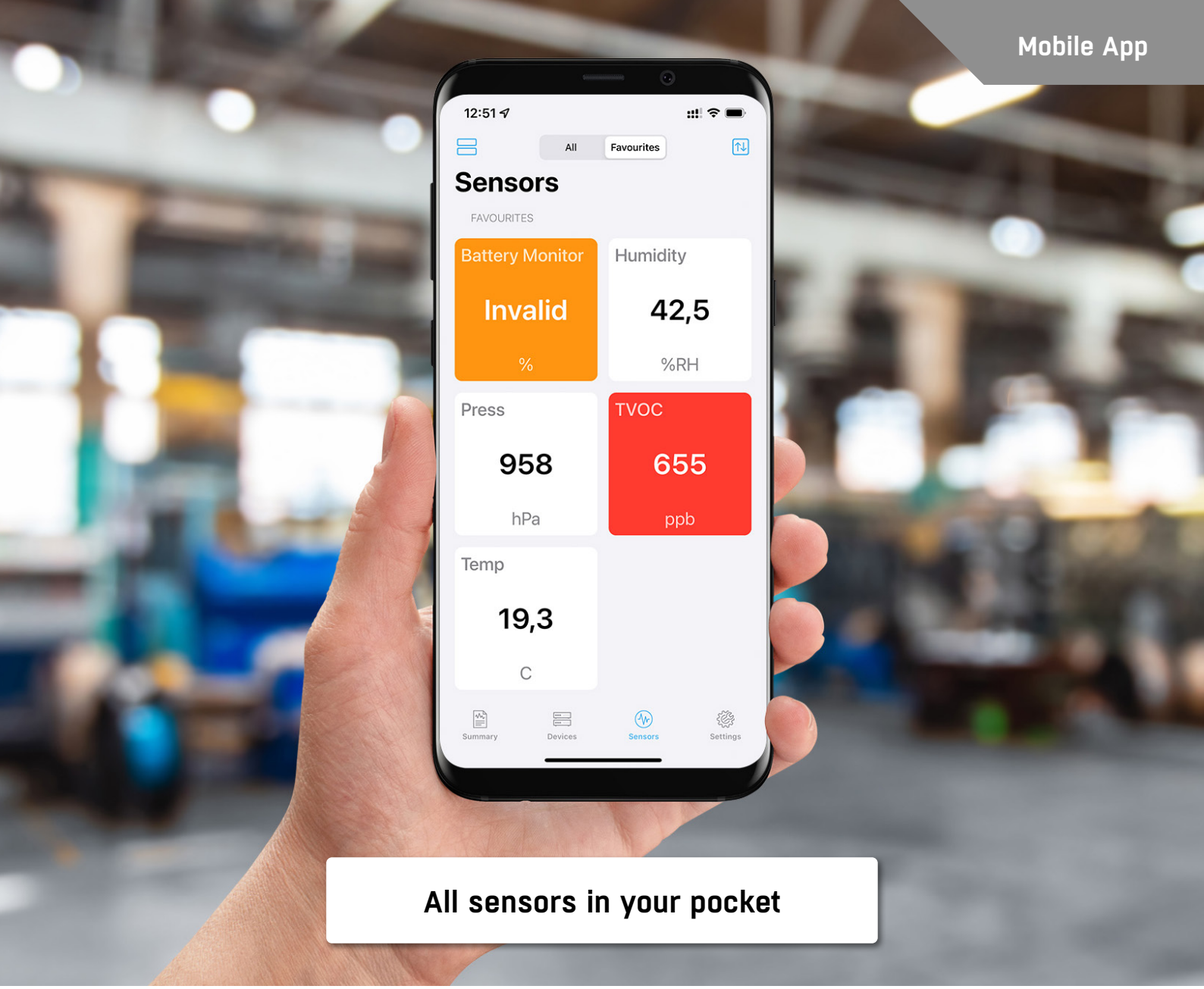
Sensors overview on the wall



HWg Monitor

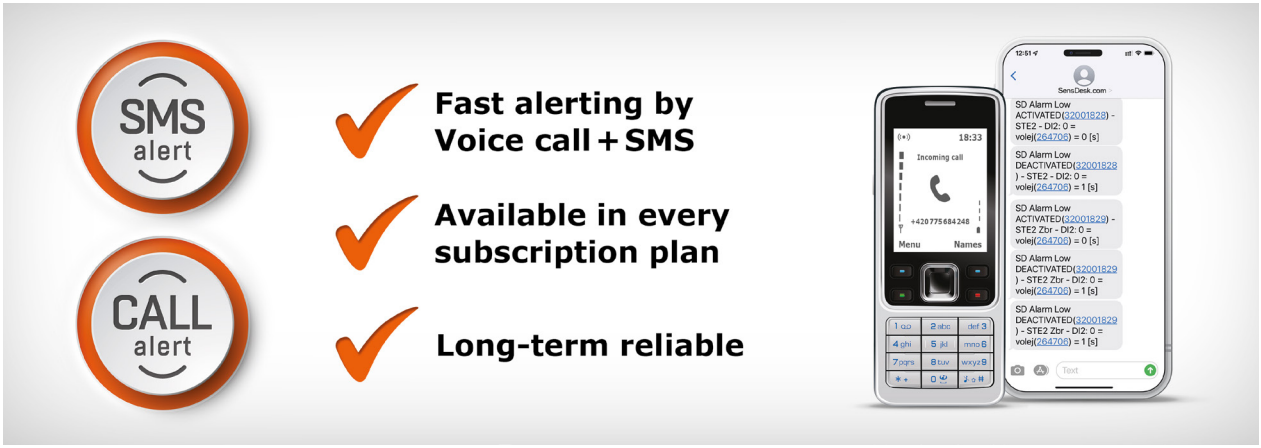
- ✔ All monitored sensors / locations in your pocket
- ✔ Select your own Favorite sensors for fast orientation
- ✔ HWg Monitor: Zoom the screen as you wish
- ✔ HWg Monitor: On the WiFi connectivity you can see all local devices / sensors
- ✔ HWg Monitor: Several user accounts / locations can be shown in one application

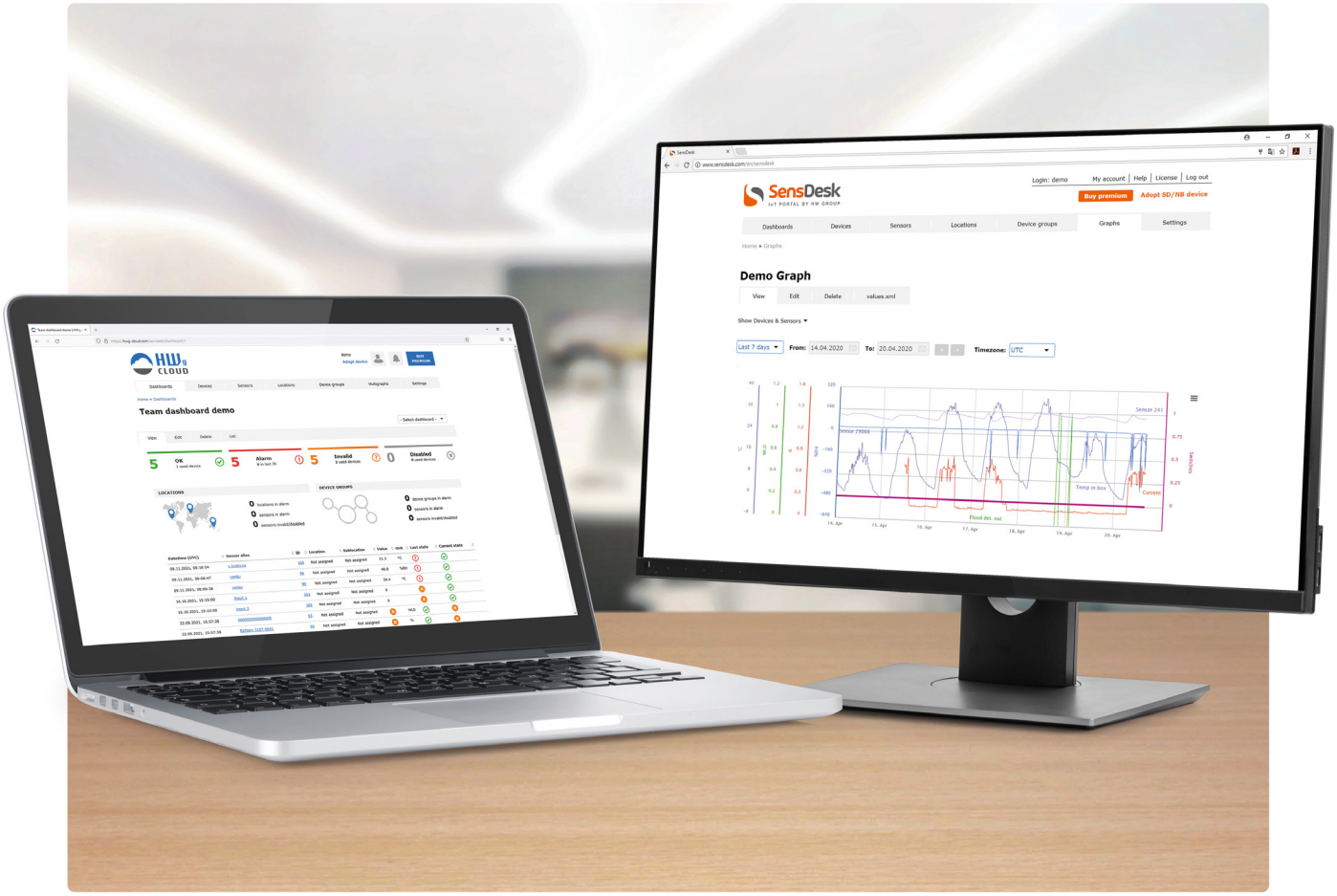
	HWg Monitor
Platform	iOS, Android
Local LAN devices	✔ (All HWg devices)
Android TV compatible	✔
Portal: **HWg-cloud.com**	✖
Portal: **SensDesk.com**	✔
Portal: Other portals	✔
Can show data from several user accounts	✔
Device	Mobile phone / Tablet



SMS & Calls available even without Mobile App

Alerting to your mobile phone can be realized from any paid SensDesk Technology portal even without mobile App(s).





Portal: SensDesk Technology

The SensDesk Technology is a portal solution from the HW group to manage remote sensors and devices (only for HW group products). SensDesk Technology portals allow customers conveniently monitor the environment in remote locations. Thanks to immediate alerting SensDesk Technology helps prevent costly damages from incidents that can occur in every facility.

Portals based on SensDesk Technology offer a central overview of all the measured values. Thanks to its user-friendly dashboards you can immediately identify a critical sensor value. Thanks to the variability of the service, the SensDesk Technology is suitable for end-users with few sensors as well as for project installations with hundreds of devices.

There is a free portal with limited functions such as basic e-mail alerting and basic management properties. For customers who need a more professional solution, there are advanced portals that offer alerting via SMS and Voice Calls, advanced management options, PDF reports, multigraphs, history logs, or integration into 3rd party systems thanks to open API.

- The **HWg-cloud.com** is a free service-oriented portal with limited functions.
- The **SensDesk.com** is an online paid service provided by HW group company. Services are available based on selected paid subscription plan.
- The **Portal Providers** are 3rd party companies running their own installations of SensDesk Technology based portals (using various commercial names).

- The portal can run online as SaaS service or offline in a closed system.
- Devices can be **migrated** between various portals based on SensDesk Technology.

www.HWg-cloud.com

- **SaaS** (Software as a Service)
- **Default portal** for all HWg devices (actual firmware)
- Basic **free portal** for **20** HW group devices (all types)
- Simple Email alerts for 2 recipients
- 10 days history, no API, no SMS, basic graphs
- Devices can be migrated to any other portal
- Based on SensDesk Technology

www.SensDesk.com

- SaaS (Software as a Service)
- **SensDesk** is technology
- SensDesk**.com** is public example of this technology
- It's **Paid option** for all HWg devices
- **3 subscription plans** (5D / 10D / 25D for 1 year)
- Differences are also in service mix (how many SMSs, PDF, ...) not device limit only
- Any **plan** can be ordered as a 1 year subscription plan

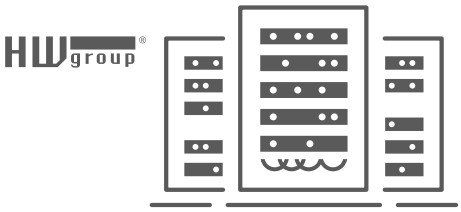
PRO / DC

PRO

- On-premise Portal hosted on customers's infrastructure
- Single tenant (one team)

DC

- On-premise Portal hosted on customer's infrastructure
- Multi tenant (multiple teams)



HW group managed portal

- Customer's Portal hosted within HW group's infrastructure
- Managed installation and maintenance by HW group
- Technical support provided by HW group
- Continuously updated versions of SensDesk Technology

SensDesk.com (SaaS)

SensDesk.com is one of the portals that are based on SensDesk Technology. It is a paid service provided by HW group company for remote monitoring of all HW group devices & sensors.

The service offers a central overview of all the values, provides sending the alarms, reporting, outputs into the Open API, etc. There is a one-month trial account. After that, the user has to buy a subscription plan to keep using the service or has to migrate the devices to another portal.

SensDesk.com	Subscription plans on SensDesk.com		
	5D Alerts	10D Log	25D Alerts & Log
Device limit	5	10	25
Users limit	1	2	3
SMS / Voice call Alerts	40/month	75/month	100/month
Email Alerts	unlimited	unlimited	unlimited
Log DB (days)	30	365	730*
HWg Monitor	✓	✓	✓
PDF reports	1	2	5
Multigraphs	1	2	5
Dashboards	1	2	5
Open API (SNMP, XML)	✓	✓	✓

*) Data are stored with history of 730 days, subscription plan (using the portal, receiving new data) is paid for 1 year only. Check the current portal prices on SensDesk.com, it's starting from 13 € / month (05/2023).

7 reasons to pay for the SensDesk.com

1) SensDesk.com can immediately alert you by **SMS or Voice call** to your mobile phone in the case of an Alarm situation. If response time is critical, **every second counts**.

2) SensDesk.com's service price is about **15 %** of the hardware costs **per year**.

3) SensDesk.com can **report you in PDF** (CSV) periodically.
- Reports for pharmaceutical / other production (HACCP).
- Reports can be printed & clicked to the invoice for your customer.

4) **Dashboards** and **Multigraphs** can help you quickly visualize what's wrong.

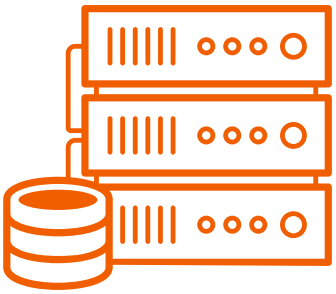
5) Log data up to several years of **data history**. Compare historical data easily.

6) The **Open API**: Connect data from SensDesk.com to any other system. Your whole portal user account (all connected sensors) is accessible by Open API (SNMP, XML) from the portal.

7) You can have a display with all your values **in your pocket with you 24/7**. Check HWg Monitor mobile app. The app can be running on your phone, in the Android TV or on the Tablet installed on the wall.

Portal on premise

The SensDesk Technology portal can be run under a license on the customer's hardware (on-premise). There are two variants of SensDesk Technology licenses, the SensDesk DC license, and the SensDesk PRO.



SensDesk DC license

- Several companies (teams) are the customer.
- The provider operates the portal as a public service at a public address.
- The portal is located on the public Internet.

Typical applications

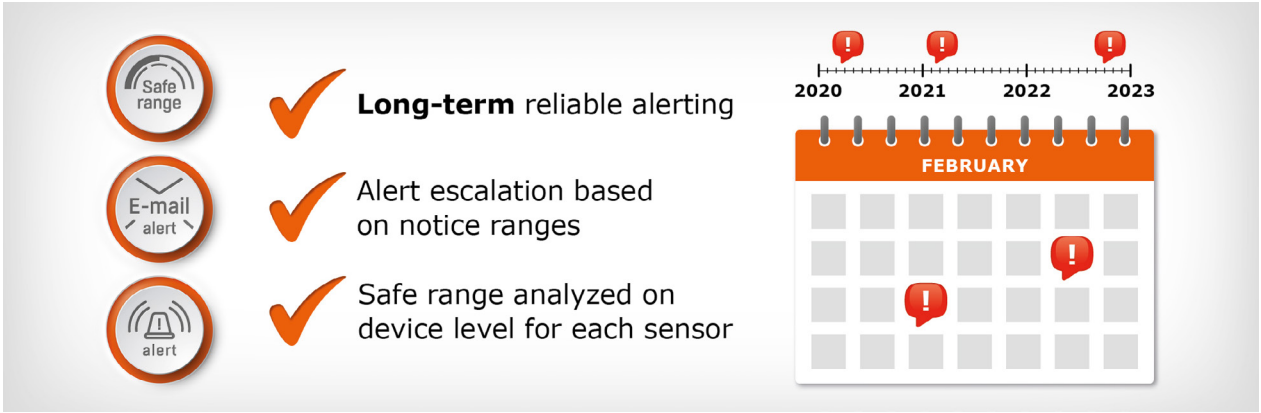
- HW group partner operates its own portal that is in the local language and has a various mix of services and prices. The local portal is meant for customers and projects in the local area (SensDesk.at in Austria).
- A producer of machines (or other products) offers extended service of remote monitoring of the machines under warranty. The machines are operated at remote locations and communicate with the portal on the public internet.
- A provider of the IT infrastructure offers to monitor the installed servers. Sensors in server rooms communicate with the portal at a public address. Users are informed about potential problems.

SensDesk PRO license

- A single company is the customer.
- A single technical team monitors and analyzes the data.
- The portal is located in a closed network, this is recommended in projects.

Typical applications

- Premises of a production factory with an internal network, SensDesk Technology portal is operated as a monitoring system for the production process. All the sensors are located in the internal network.
- A network of drug stores that monitors the storage conditions of medicines at several branches is an example of usage.



Perseus Remote Configuration with SensDesk Technology

Remote Config: New Portal feature

The HW group has recently made several significant updates to the SensDesk technology. These new features are already available on all updated portals (SensDesk.com and all third-party portals). One of these updates was a highly requested feature among our customers - remote configuration of Perseus devices via the portal using SensDesk Technology.

With Remote Config, you can access the Perseus device's web GUI via the portal's web interface. This means that you can configure any Perseus device remotely from the SensDesk Technology-based portal as if it were on your table.

In this article, we will explain how Perseus remote configuration works in the Portal, what the requirements are, and how it changes operations with Perseus-based monitoring installations.

- The Remote Config feature is supported by all devices of the Perseus platform.
- The Remote Config feature can be activated on any portal based on SensDesk Technology.
- Remote Config must be activated in the Perseus web GUI.
- Remote Config requires Perseus to communicate with the portal via HTTPS/443 port.
- Remote Config can be used via LAN or LTE backup.

Using the Remote Config from the SensDesk.com Portal

How to setup Remote Config feature

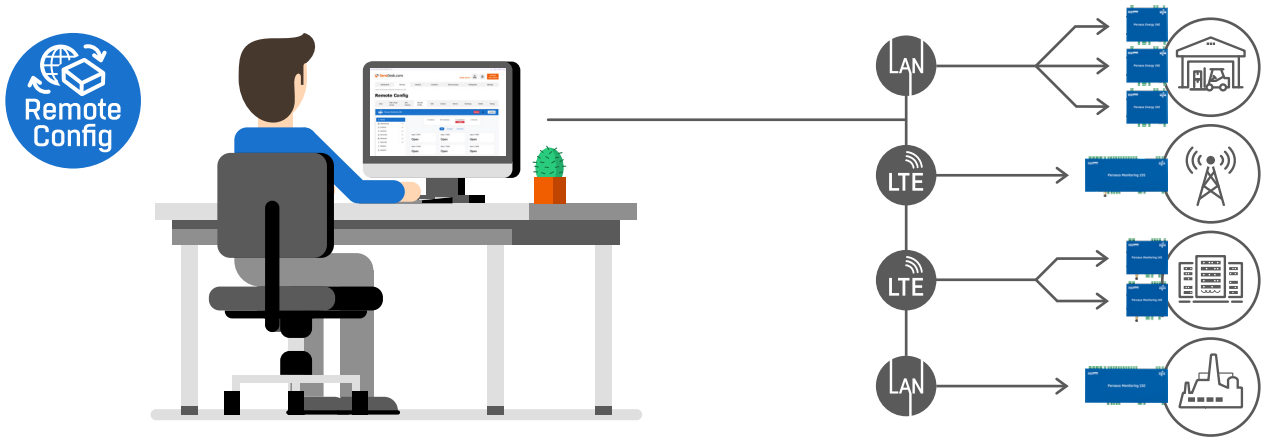
First, it's important to note the Remote Config feature is not supported on HWg-cloud.com Portal. It only works with paid accounts on SensDesk.com Portal and with third-party portals provided by our partners, and DC/PRO/Standalone installations. A full list of local portal providers can be found here: https://hwg-cloud.com/#providers.

Second, remote configuration with Perseus and SensDesk Technology is intentionally available only via secure communication. The device must use the HTTPS portal address and port 443 for remote configuration with the customer's portal account to work.

Third, the Perseus device itself has to be updated to the latest firmware version.

The team name and password needed for Remote Config are provided by the Portal and can be found by clicking the profile settings button and selecting "My team" > "Portal settings."

Now that the technical details have been explained, we can discuss why remote configuration for Perseus devices is such a highly demanded feature.



Now supported by these 3rd party portal providers

How the Remote Config feature changes day-to-day operations with Perseus.

Perseus remote configuration with SensDesk Technology transforms remote monitoring paradigm.

With remote configuration, customers could be instructed to only fill out the portal settings on their devices, and everything else could be configured remotely as if the person were connected directly to one of the Perseus units.

Before this feature was implemented, someone had to physically be onsite to make the initial setup of the Perseus device. This included connecting all sensors, detectors, and any other possible data sources. Then, if properly connected and, set configure all the meters with underlying variables, conditions, and actions for alerts and setup automation.

Furthermore, a single HW group partner can now have remotely configurable Perseus units in their own cloud. They can manage their customers' teams and remotely change device parameters. They can also connect and configure more complicated projects, such as those with several external M-Bus meters or third-party Modbus/RTU sensors.

This means that device management can be outsourced to someone who doesn't have to travel anywhere; they can simply log into the customer's Portal account and manage everything from there. No longer VPN or Team Viewer required.

Another great benefit is the Remote Config feature when using the Perseus device with an embedded LTE modem. With the LTE backup connectivity feature, Perseus can connect to the portal via LAN or LTE if LAN connectivity is unavailable. It even switches between LAN and LTE automatically.

This makes Perseus remote configuration via the Portal a flexible and universal choice in the absence of an Ethernet connection.

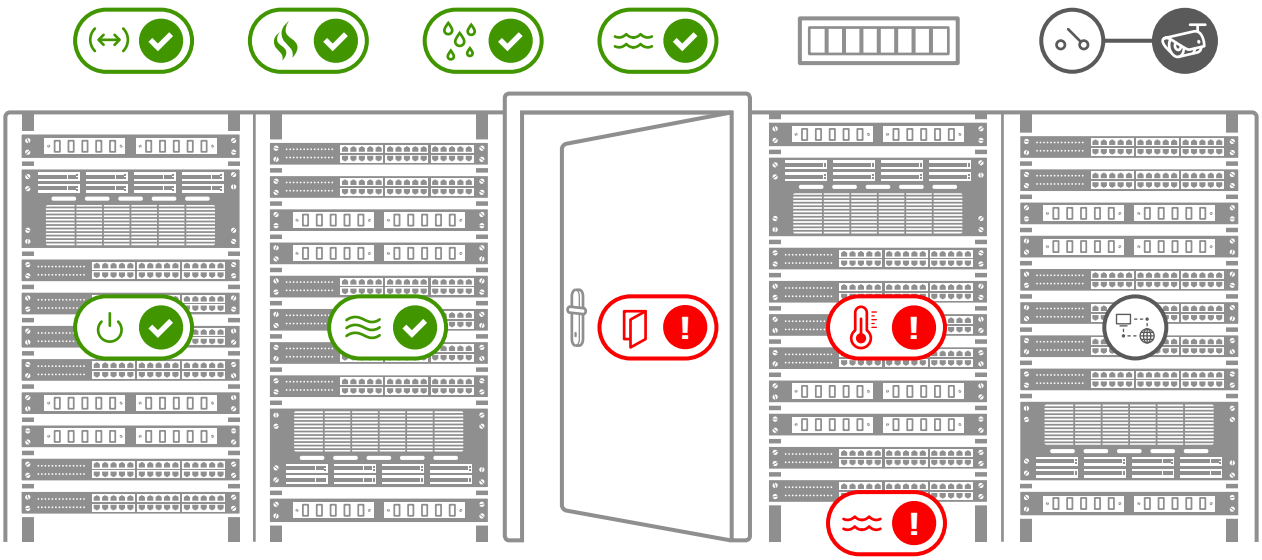
We hope the Perseus remote configuration option helps HW group customers increase the number of scenarios in which they can implement remote monitoring and simplify the management of remote installations.

System Solutions

The SensDesk Technology portals are a universal and robust solution for many applications. Create an account on any of the portals and start benefiting from the SensDesk Technology. For details about individual SensDesk Technology portals see pages 50 – 53.

The SensDesk Technology portal handles all the monitoring you need. It allows you to remotely upgrade your devices, identify problems, perform mass operations and manage your entire IoT network. SensDesk Technology will give you the best tools to analyze your measured values so you can rely on your data. You will always be alerted on time in case of a problem. You can also get periodical reports to make sure that you are compliant with regulations.

Data centers & server rooms

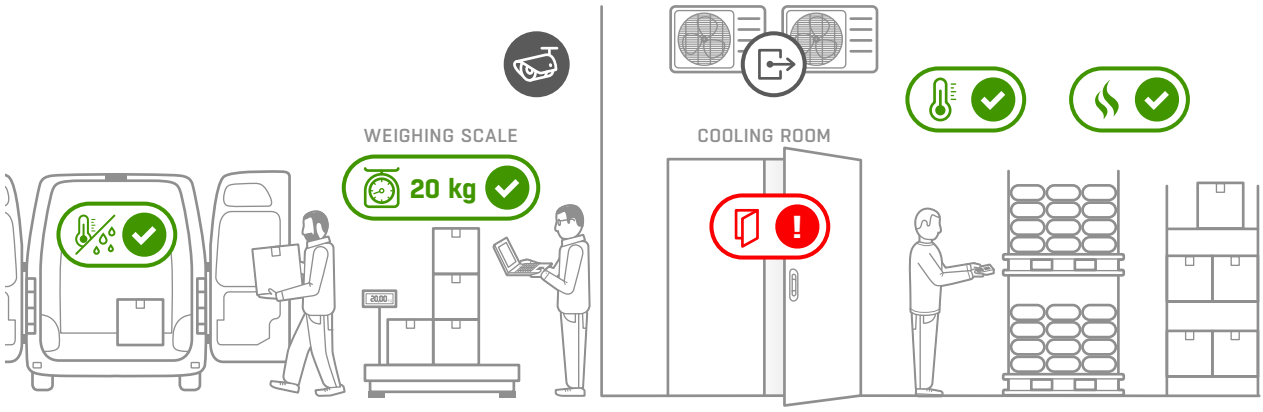


Airflow detector
Power detector / switch
Smoke detector
Water leak detector
Thermometer
Motion detector
Humidity detector
Door contact detector
Ping
Camera switch
Camera (DI)

Data centers and server rooms are one of the most critical and vulnerable parts of every company. A simple overheating issue can degrade application performance for the end-users. Not to mention critical damage by heat, water leaks, or fire. We offer a simple and easy to install solution using HW group devices and the SensDesk Technology portal. SensDesk Technology offers you different user and administration levels and tools for mass operations making it robust and convenient even for large installations. Thanks to SensDesk Technology reports, graphs, and alarms you always know where the problem is. Technicians can receive alarms in realtime, drill down to the exact issue and start troubleshooting before the end-user experiences any impact.

- ✔ Complex remote monitoring
- ✔ Detailed analysis of data, reports
- ✔ Several layers of alarming and users
- ✔ Temperature and humidity monitoring
- ✔ Water leaks and fire detection
- ✔ Motion detection
- ✔ Output data to other systems

Warehouses and storage rooms

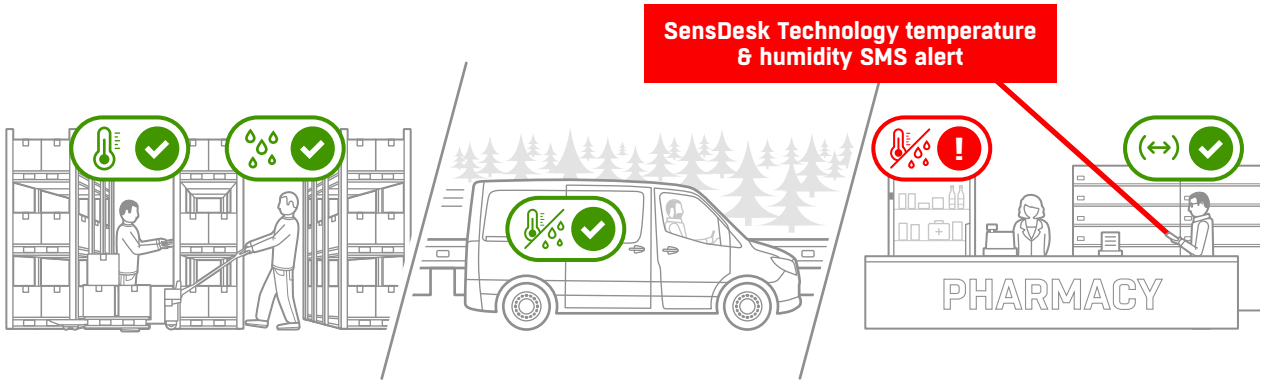


Scale | Thermometer | Smoke detector | Door contact detector | Thermometer / humidity detector | Relay output | Camera (DI)

Warehouse operators need an efficient way to monitor temperature and humidity in their storage facilities and vehicles. Thanks to the SensDesk Technology monitoring portal and HW group IoT devices, your storage facilities will be safe and compliant to regulations. You can also make sure your cargo is within the weight limit with scale with 4-20 mA industrial input. In case of overheating, you can remotely control the air conditioner.

- ✔ Temperature and humidity monitoring
- ✔ Water leaks and fire detection
- ✔ Intrusion detection
- ✔ Remote air condition control
- ✔ Easy deployment
- ✔ 4-20 mA industrial sensor input

Pharmacy and medical

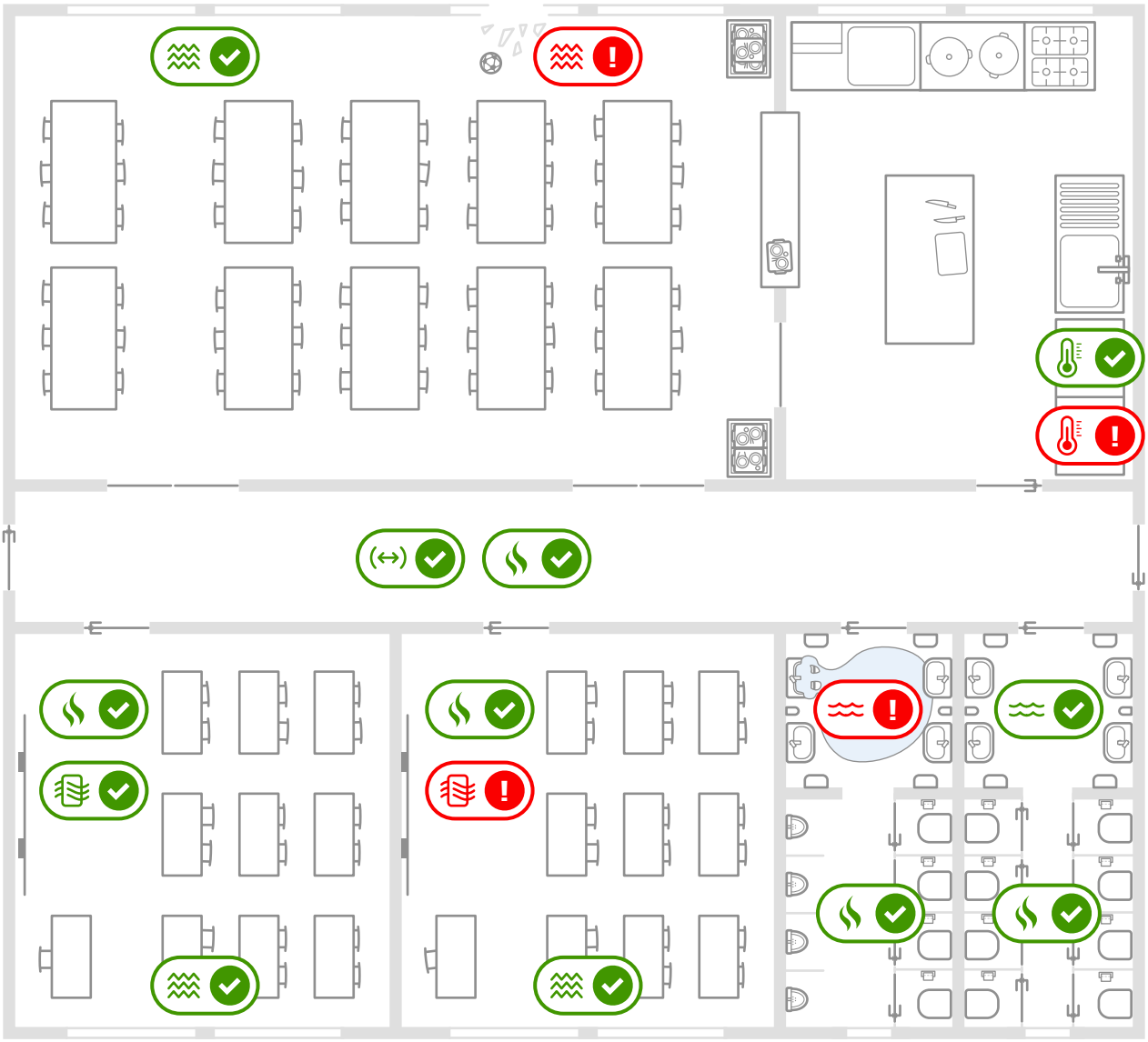


Thermometer | Humidity detector | Motion detector | Thermometer / humidity detector

Pharmacies and medical companies are required to comply with many standards and regulations. With SensDesk Technology you can simply set the safe values of temperature, humidity and other conditions. Then you can receive alarms whenever there is a problem and the values get out of the safe range. You can also create reports to confirm that you are complying with regulations.

- ✔ Temperature and humidity monitoring
- ✔ Precise flat sensors for fridges
- ✔ Wide temperature range down to -200 °C
- ✔ Easy installation and setup
- ✔ Scalable for multiple fridges and sites

Schools and public buildings

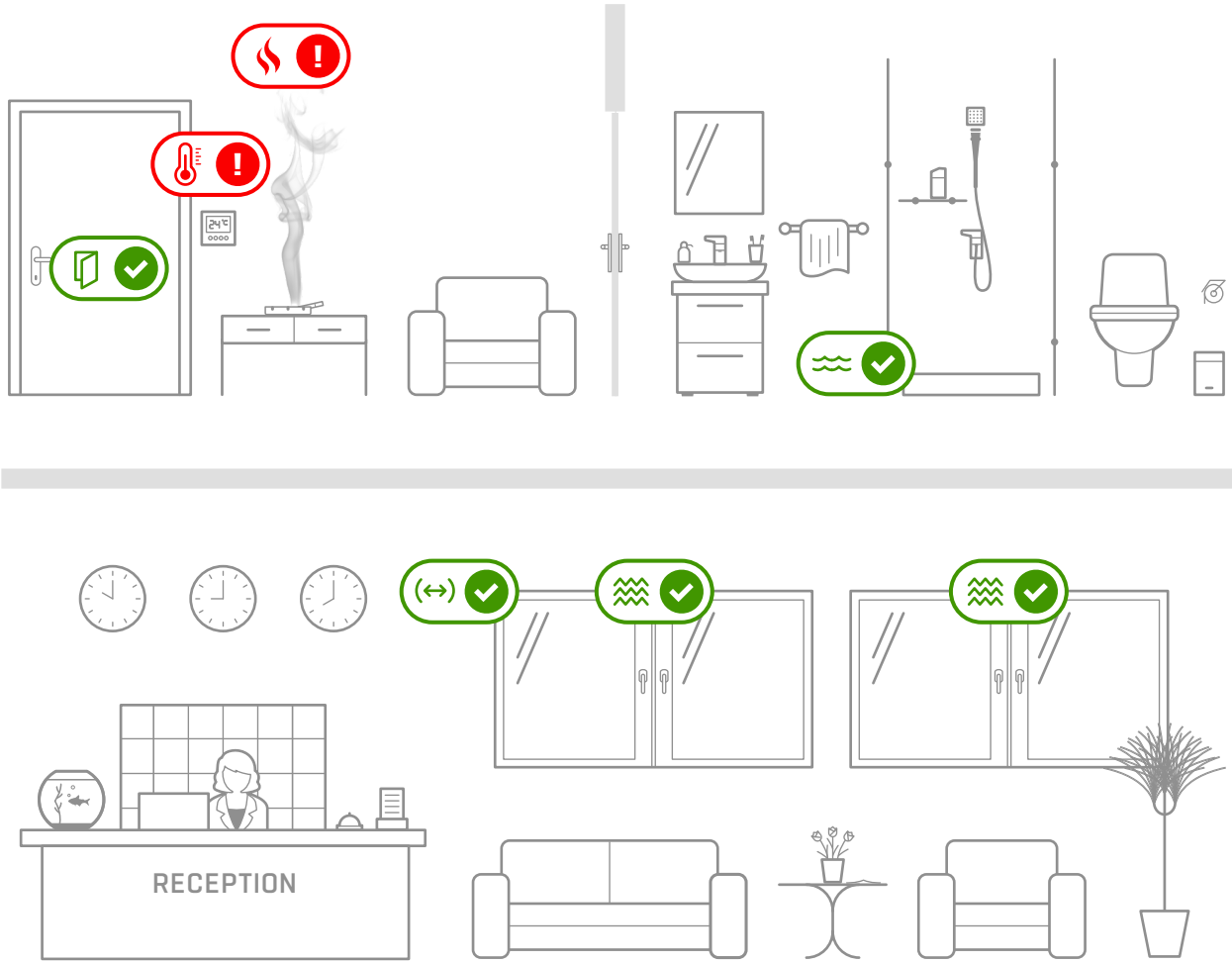


Vibration detector
Air quality detector
Smoke detector
Water leak detector
Motion detector
Thermometer

Schools and public institutions need scalable and reliable monitoring. SensDesk Technology helps you manage your IoT sensors data even in large installations. You can remotely control the temperature and air quality in the rooms, data is collected and analysed. The system can react to alarm values immediately. Fire and water leaks are serious hazards that can be carefully monitored by our IoT monitoring devices combined with SensDesk Technology portal.

- ✔ Complex IoT monitoring
- ✔ Hundreds of measuring points
- ✔ Detailed analysis of data, reports
- ✔ Several layers of alarming
- ✔ Access control solution available

Hotels and house rentals

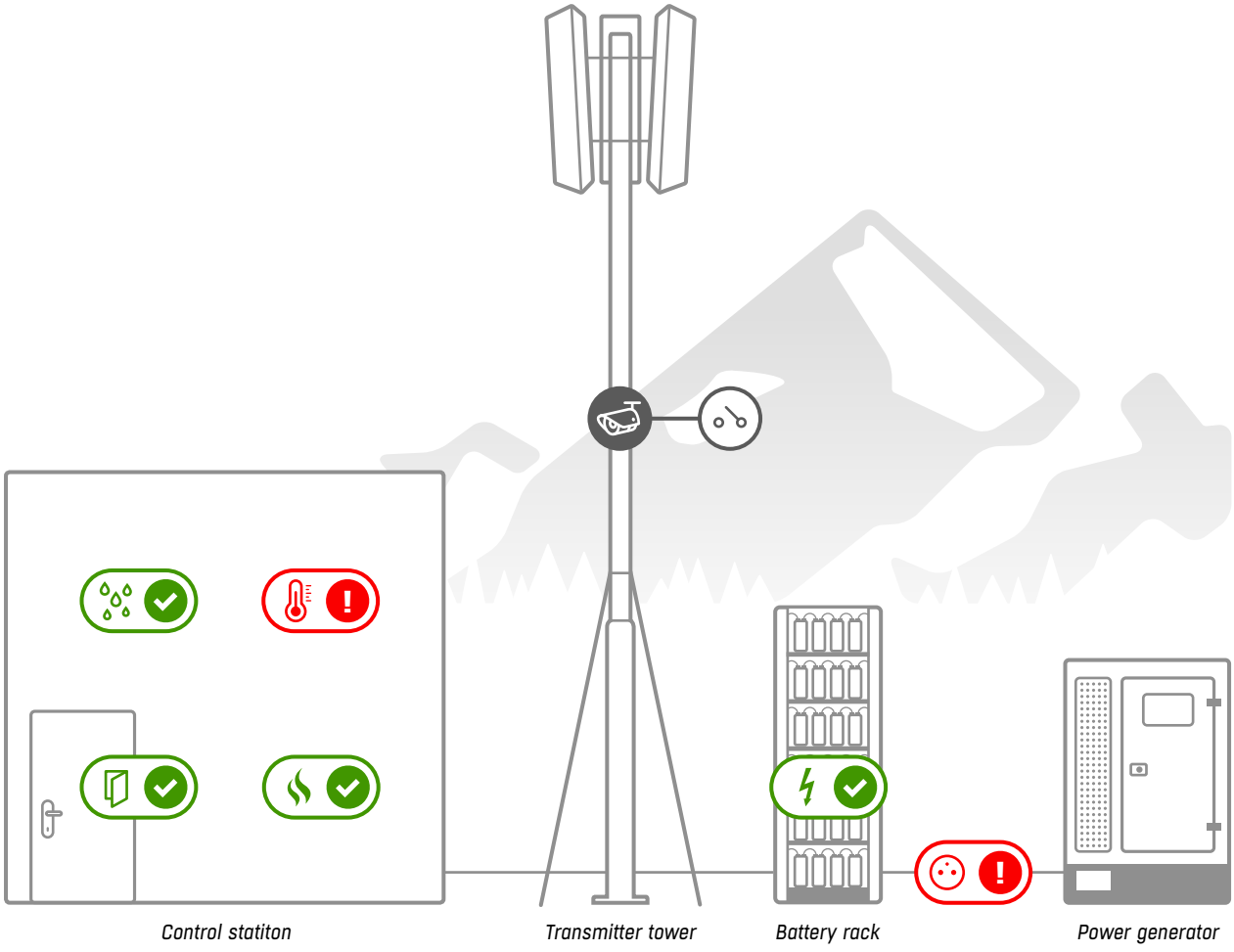


Vibration detector
Door contact detector
Smoke detector
Water leak detector
Motion detector
Thermometer

Water leaks or fires in hotels or house rentals can cause very costly damages. The SensDesk Technology portals help you watch over all these risk factors. In case of an event it will immediately send out an alarm or react by shutting down water. The SensDesk Technology portal and HW group IoT devices have been successfully deployed in a number of solutions for many hotels and house rentals.

- ✔ Complex IoT monitoring
- ✔ Hundreds of measuring points
- ✔ Detailed analysis of data, reports
- ✔ Several layers of alarming
- ✔ Access control solution available

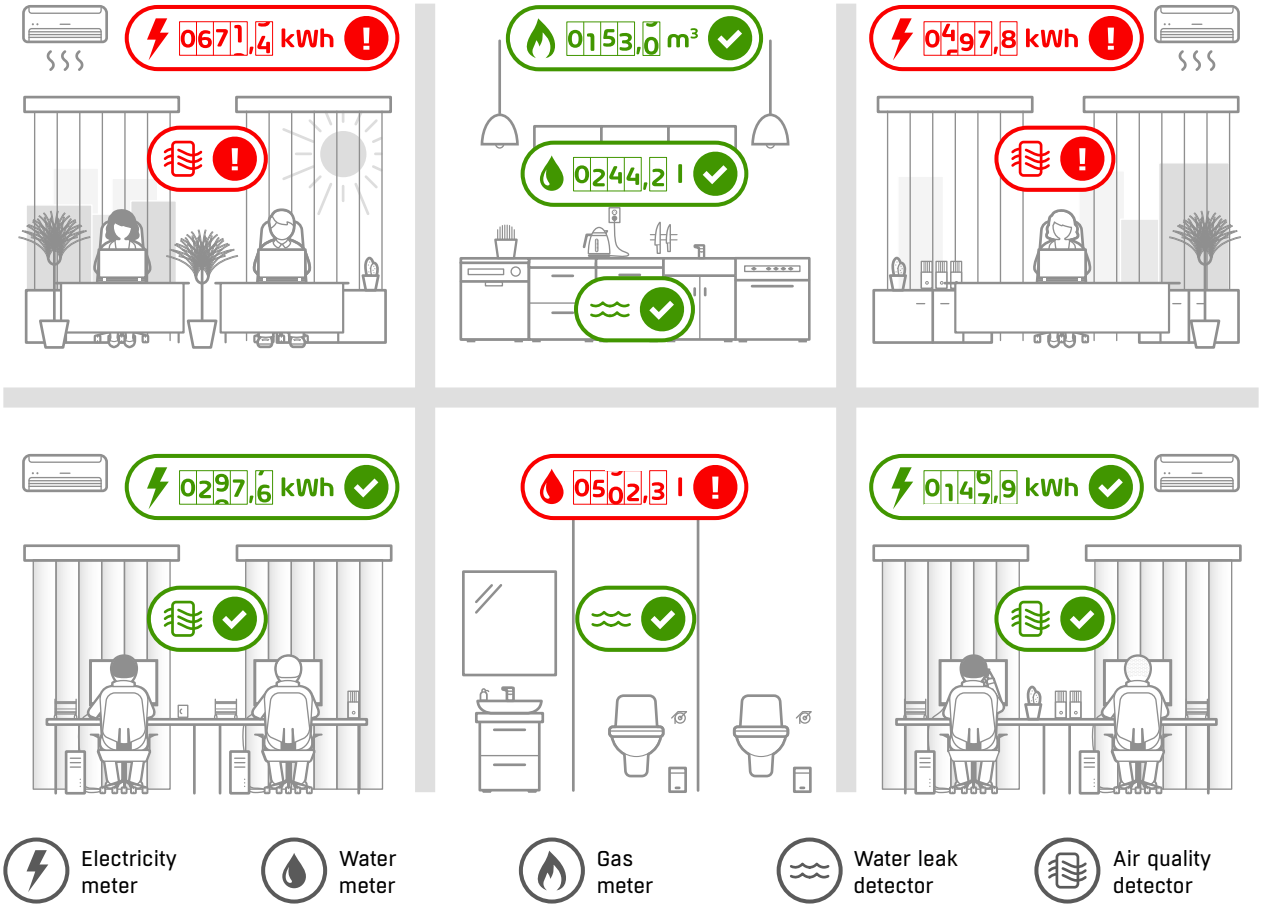
BTS stations and technology



Technology in remote locations needs reliable monitoring of cooling, heating, and site conditions. SensDesk Technology portals and HW group IoT sensors can detect A/C failures, water leaks, movement, intrusion and more. SensDesk Technology offers you different user and administration levels and tools for mass operations so it's robust and convenient even for large installations. You may also need to monitor your proprietary technology using digital inputs and outputs.

- ✔ Complex remote monitoring
- ✔ Hundreds of measuring points
- ✔ Detailed analysis of data, reports
- ✔ Several layers of alarming and users
- ✔ Output data to other systems

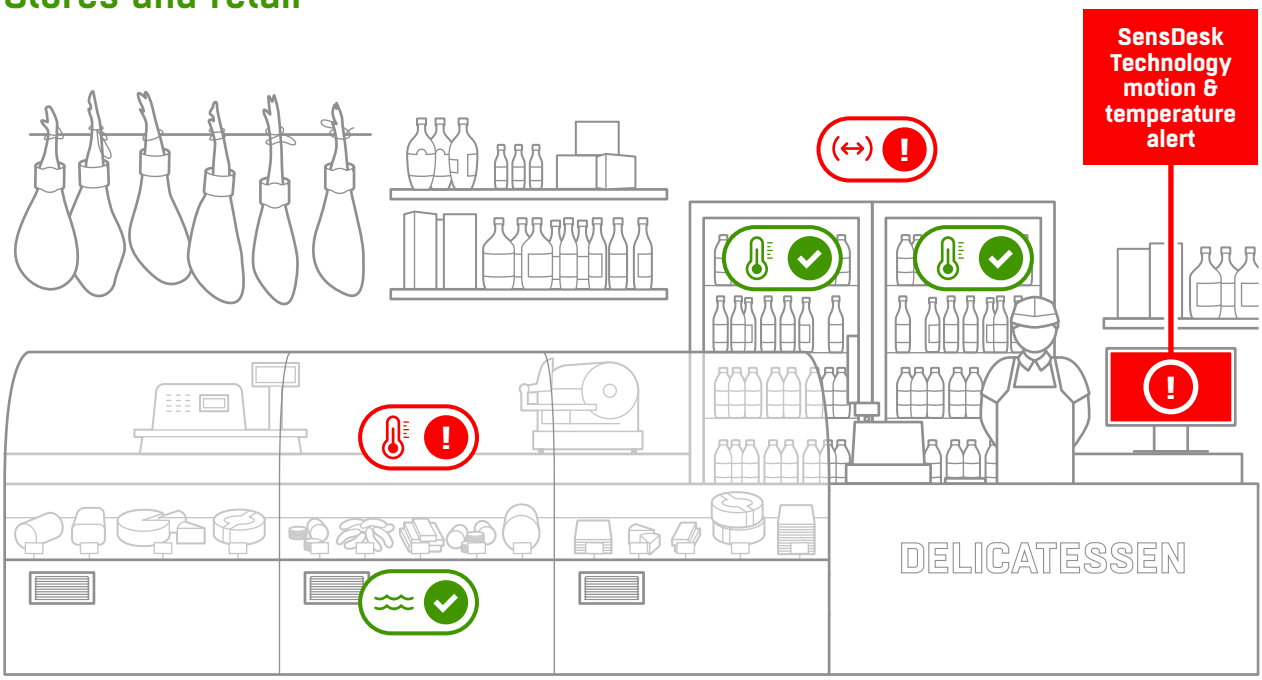
Smart cities & municipalities



In smart cities and municipal facilities the monitoring of power consumption is important. These values are also affected by outdoor climatic conditions and weather. A common problem in these places is determining the optimal setting for air conditioner and CO_2 concentration. Water leaks must also be monitored. The Sensdesk Technology portal together with HW group IoT units let you develop the best solutions for your smart building's needs and have all the important values under control. Thanks to SensDesk Technology reports, graphs, and alarms you always know which values changed and you can respond quickly to the developing situation. SensDesk Technology portals help the overall optimization of the building's operation and can provide you with huge cost savings.

- ✔ Complex IoT monitoring
- ✔ Hundreds of measuring points
- ✔ Detailed analysis of data, reports

Stores and retail



Thermometer

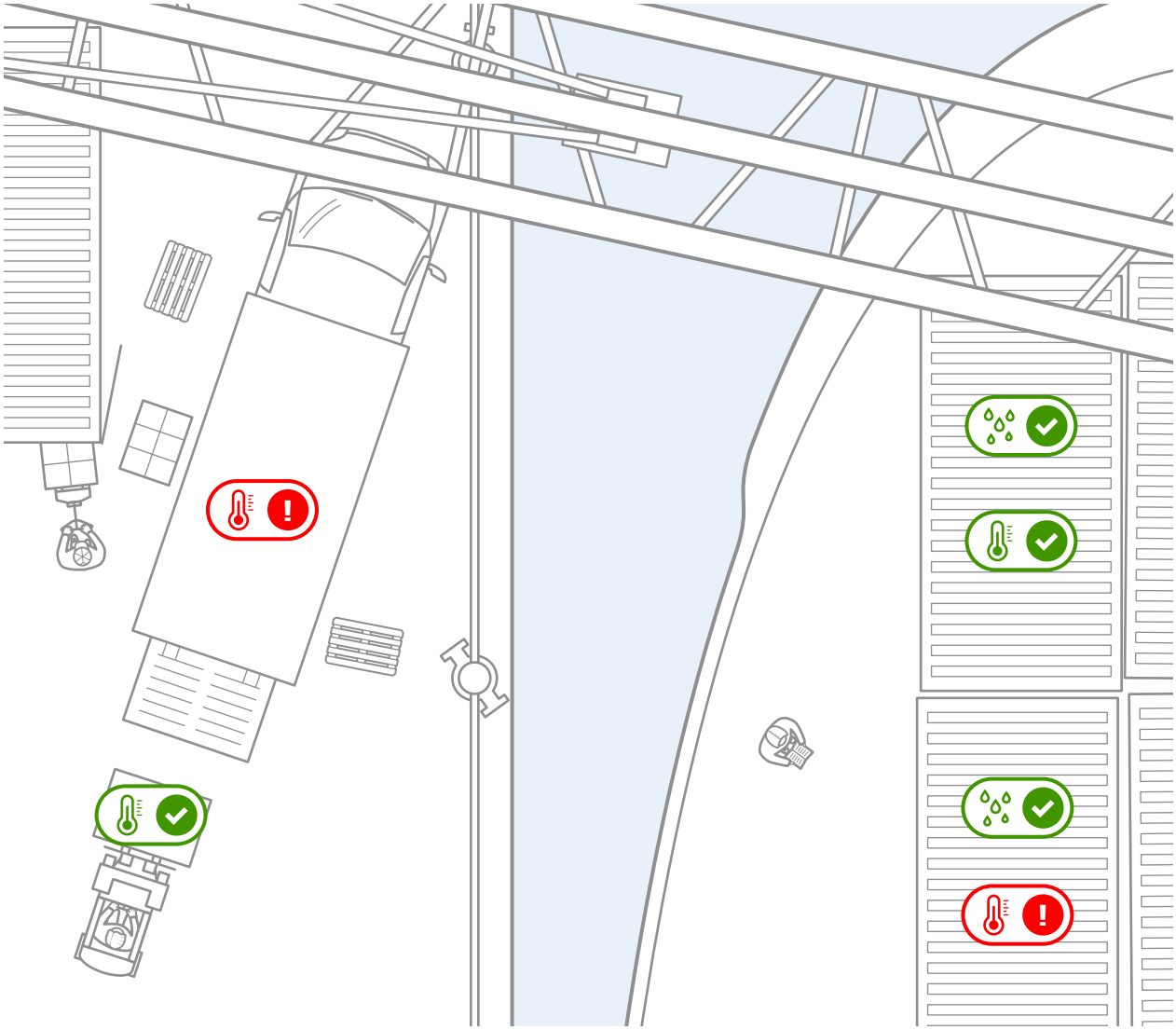
Water leak detector

Motion detector

Storing food requires precise temperature monitoring, fast alarms and detailed reporting. Our NB devices with the SensDesk Technology portal can help you with that. NB-2x1Wire will monitor your refrigerator temperature. The NB-WLD will detect water leaks under the refrigerator. Thanks to the NB-2xIn you will receive alarms when unauthorized motion is detected in your store. All your data can be summarized in automated reports and emailed to you regularly.

- ✔ Temperature and humidity monitoring
- ✔ Water leaks and fire detection
- ✔ Motion detection
- ✔ Automatic reports
- ✔ Easy installation

Logistics & transportation



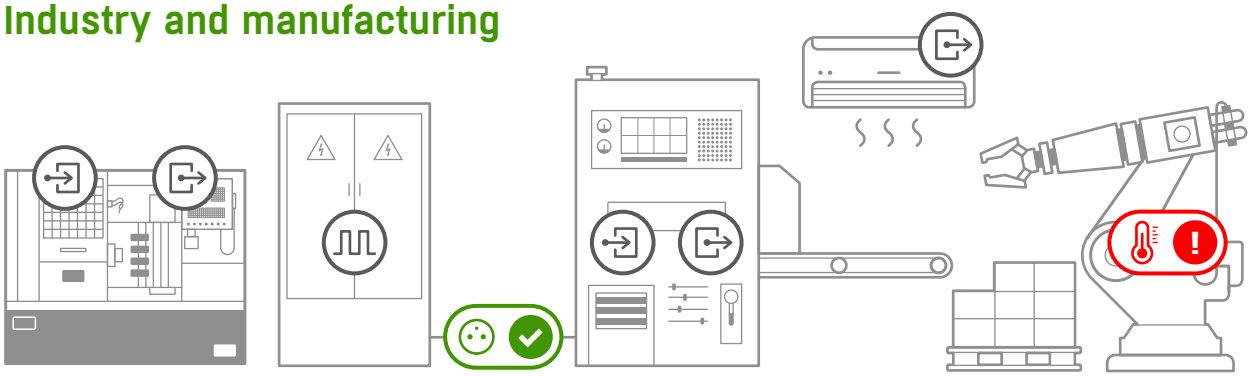
Humidity detector

Thermometer

When transporting and storing sensitive goods it is very important to have all the right values under control and make sure the limits are not exceeded. Such places as shipping container yard need special supervision because there is a huge amount of goods which must be transported. If the current temperature in trucks or containers is not correct, there is a risk of significant damage. For critical shipment monitoring, we recommend the implementation of the SensDesk Technology portal with HW group products. With alarms, graphs and timely reports, you can respond to unexpected influences promptly in order to have all shipments under control. Once a value approaches the set safe limit, you will automatically be alerted by email or SMS so that you can take countermeasures.

- ✔ Temperature and humidity monitoring
- ✔ Immediate alarming on several levels
- ✔ Automatic reports

Industry and manufacturing



Power detector · Thermometer · Digital input · Relay output · Pulse counter

Machinery and equipment need to be protected as well as the people operating it. The same goes for industrial environments, manufacturing halls, and stockrooms.
Sensdesk can provide this essential monitoring of your technology and workspace reliably and economically 24/7. You can monitor critical temperatures, power to the machines, motion, air conditioning, battery backups... the list is endless. All of that in one reliable system that can be installed in your factory and does not have to be in a public cloud.

- ✔ Complex remote monitoring
- ✔ Detailed analysis of data, reports
- ✔ Several layers of alarming and users
- ✔ Temperature and humidity monitoring
- ✔ Motion detection
- ✔ Output data to other systems
- ✔ Intrusion detection

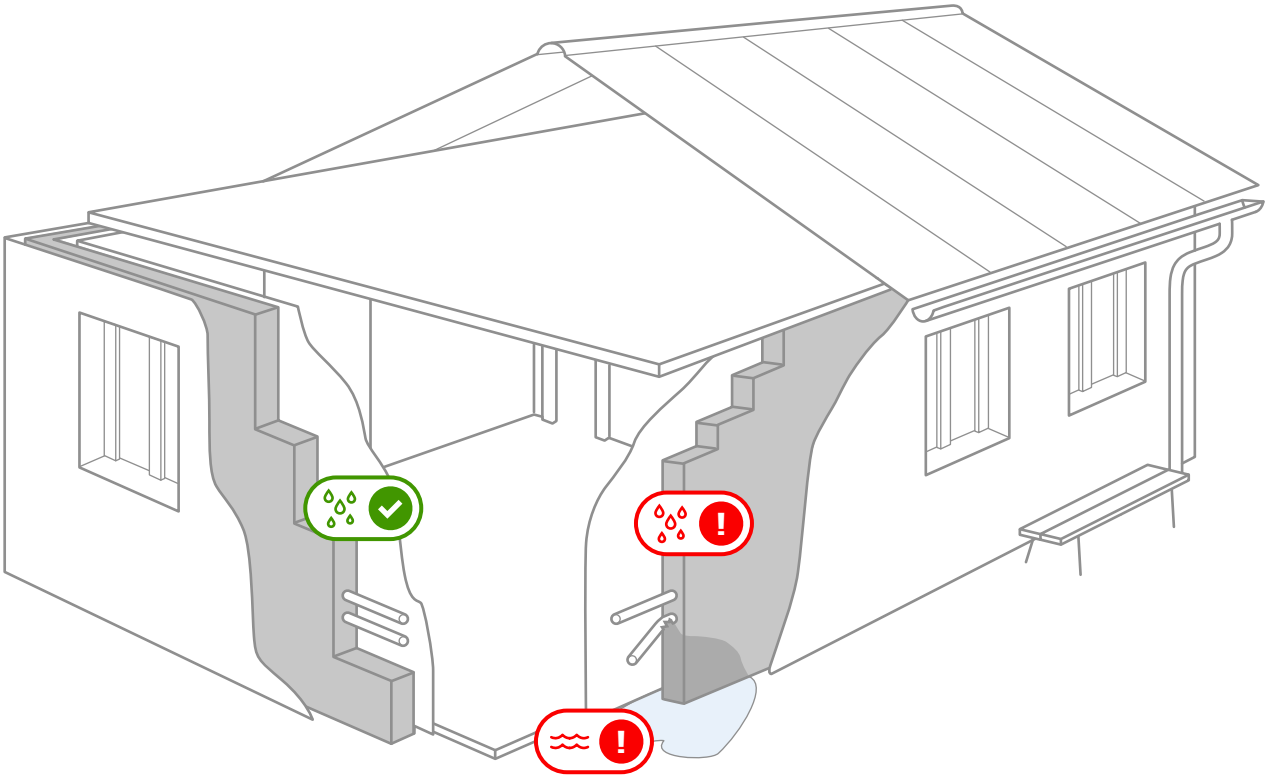
Wine shop

Door contact detector · Power detector · Motion detector · Water leak detector · Thermometer

In order for wine to not lose its value, the temperature of wine must be monitored to be sure it remains at the right temperature, as most wines are damaged by temperature fluctuations. Our products and the SensDesk portal in combination with a wine refrigerator are able to monitor the values and inform you immediately in case any temperature changes occur. You will receive a warning in the event of a water leak.

- ✔ Complex remote monitoring
- ✔ Temperature and humidity monitoring
- ✔ Water leak detection
- ✔ Motion control
- ✔ Reports proving the proper wine storage

Water leaks & construction damage



Humidity detector

Water leak detector

Water leaks within the hidden construction of buildings are very dangerous because they sometimes take weeks or months to become visible. The costs to repair them are then enormous. HW group water leak and humidity sensors can be installed within walls or hidden places to monitor any leaks or condensing humidity. You will get immediate alarms with the SensDesk IoT portal and the water source can be shut down automatically or remotely. Installation is easy and the costs are very low compared to the risks of water leak damage.

- ✔ Detailed analysis of data, reports
- ✔ Temperature and humidity monitoring
- ✔ Water leaks detection
- ✔ Complex remote monitoring
- ✔ Output data to other systems

Technology

1W-UNI

RJ11 port for several sensors. 60 m total length per each active port. Power included, each sensor has its own unique ID.

M-Bus

M-Bus is designed for data transfer in the area of measurements, HVAC control, as well as gas, water and electricity metering.

Modbus/RTU

A bus for industrial environments. Sensors can be up to 1000 m away. ASCII-based communication.

XML

Used to exchange structured data with applications and as a format of configuration files. Available files are XML setup and XML values.

SNMP

Simple protocol for exchanging basic system information. Most well-known 3rd party SNMP SW: Nagios, PRTG, Cacti, CapTemp, Zabbix, SolarWinds.

Modbus/TCP

Extension of Modbus RTU protocol. Supported in 3rd party SCADA SW e.g. Wonderware-In Touch, Citect, Siemens-WinCC.

HTTPs

HTTPs is a secure (encrypted) version of the HTTP communication protocol that is used to display WWW pages.

IPv6

Successor of IPv4. The protocol extends the address field from 32 to 128 bits. Integrated security and mobility functions.

MQTT

MQTT is a simple way of transferring small volumes of data over a standard TCP/IP network.

SMTP

SMTP (Simple Mail Transfer Protocol) is used to transfer electronic mail (e-mail) messages.

TLS

TLS protocol provides secure communication over the Internet (for WWW, e-mail and other types of data transfer).

Radius

Radius protocol - 802.1X central security management.

GPRS

A service for connecting mobile devices to the Internet via the GSM (2G) mobile network.

LTE

4G mobile phones technology for connecting devices to the Internet via the GSM (LTE) mobile network.

NB-IoT

NB-IoT (NarrowBand Internet of Things) is a low-power radio technology standard for cellular devices and services. SIM card (for NB-IoT only) is required.

SNTP

Protocol for synchronizing a device's internal clock with a time server over the Internet. Allows all devices in a network to use the same and accurate time.

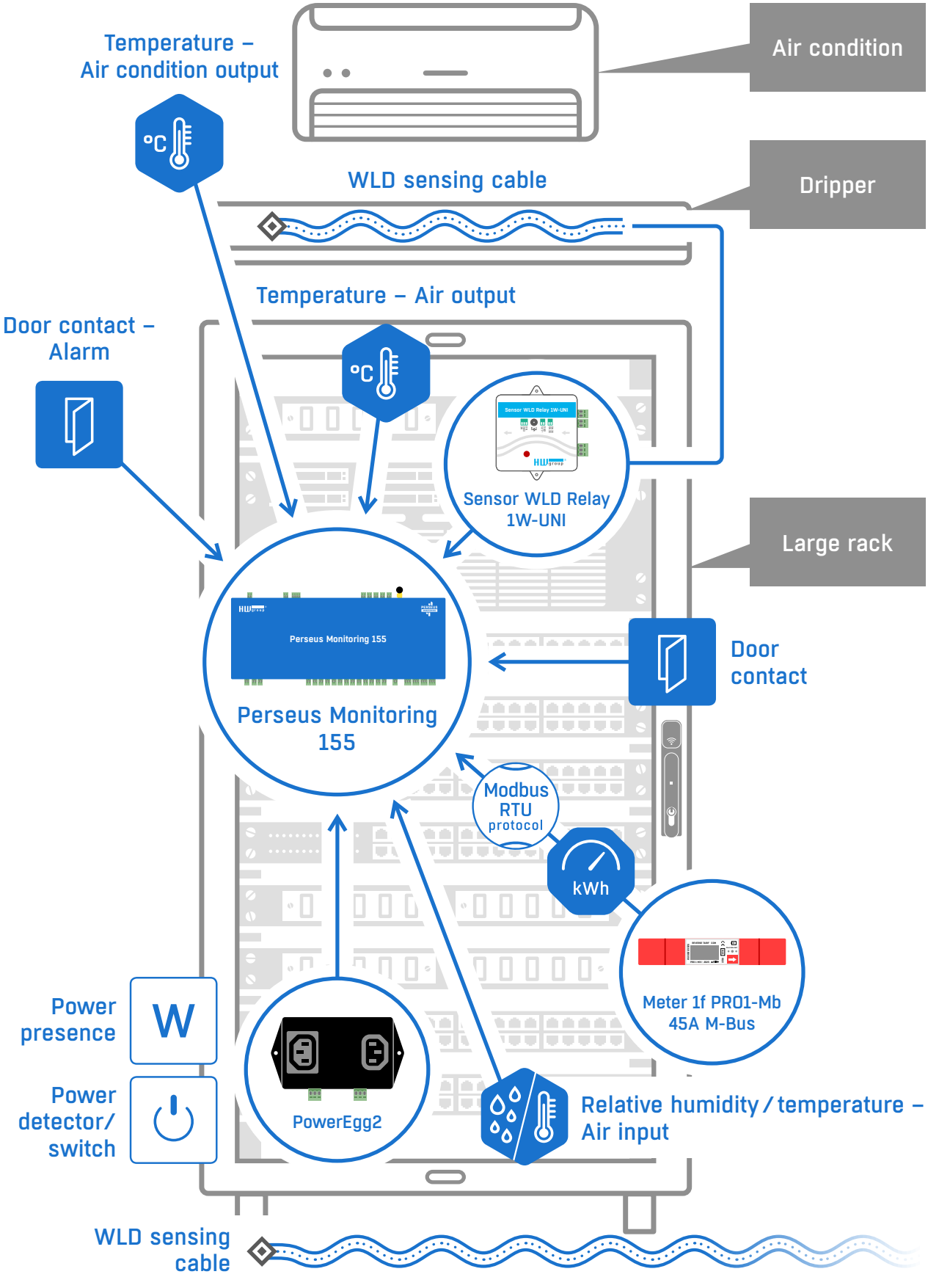
netGSM

The netGSM function allows to share one GSM modem connected to one of the devices with other devices in the same network.

HWg-Push

HTTP based protocol for active communication from a device (IP sensor) to a central server (portal). This protocol is used for all SensDesk Technology based portals.

Recommended rack monitoring solution



	Ethernet / web interface	PoE (Power over Ethernet)	Wi-Fi	GSM / LTE	NB-IoT	HWg XML Devices	RJ11 sensors (1-Wire / 1-Wire UNI) values	RJ11 ports	Modbus/RTU	M-Bus	WLD zones	DI (Digital Input)	DO (Digital Output)	VDO (Virtual Digital Output)	Meters API	Telco power -48 V	Data Logger in the device	HWg-cloud.com (free service)	SensDesk.com (paid service)	HTTP	HTTPs	E-mail alerts / reports notification	SMS + Call (Ring) notification	SNMP v1 / v3 (Open API)	SNMP trap	XML API (Open API)	Modbus / TCP (Open API)	MQTT (Open API)	IPv6	Remote Config	BACnet protocol
Ares 12 GSM / LTE				✓			14	2				2					✓	✓	✓			5	5			✓					
Damocles2 1208	✓	✓										12	8	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
Damocles2 2404	✓	✓										24	4	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
Damocles2 MINI	✓	✓										4	2	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
IP WatchDog2 Lite	✓	✓											2	8			✓	✓	✓	✓		2	1*	✓	1	✓					
IP WD2 Industrial	✓	✓											2	8			✓	✓	✓	✓		2	1*	✓	1	✓					
Perseus Energy 240	✓					✓			✓					✓	✓		✓	✓	✓	✓	✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Energy 242	✓					✓	✓	4	✓	✓	1	2	1	✓	✓		✓	✓	✓	✓	✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Energy 285	✓			✓		✓	✓	6	✓	✓	1	4	2	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Monitoring 140	✓					✓	✓	4	✓		1	4	2	✓	✓		✓	✓	✓	✓	✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Monitoring 145	✓			✓		✓	✓	4	✓		1	4	2	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Monitoring 150	✓	✓				✓	✓	8	✓		1	16	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓
Perseus Monitoring 155	✓	✓		✓		✓	✓	8	✓		1	16	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poseidon2 3268	✓	✓					8	2				4	2	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
Poseidon2 3468	✓	✓					8	2				4	2	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
Poseidon2 4002	✓	✓					16	6				12	4	8		✓	✓	✓	✓	✓	✓	5	5*	✓	5	✓	✓	✓	✓		
SMS-GW3 GSM / LTE	✓			✓														✓	✓	✓				✓		✓					
STE2 LITE	✓		✓				4	1										✓	✓	✓	✓	5	5*	✓		✓					
STE2 PLUS	✓	✓	✓				15	2				2		8				✓	✓	✓	✓	5	5*	✓	✓	✓			✓		
STE2 R2	✓	✓	✓				5	2				2						✓	✓	✓	✓	5	5*	✓		✓					
WLD2	✓	✓	✓								4			4				✓	✓	✓	✓	4	4*	✓	4	✓					
NB-2x1Wire					✓		4	2										✓	✓	✓	✓	✓	✓	✓	✓	✓					
NB-2xIn					✓							2						✓	✓	✓	✓	✓	✓	✓	✓	✓					
NB-2xOut					✓								2					✓	✓	✓	✓	✓	✓	✓	✓	✓					
NB-WLD					✓						1							✓	✓	✓	✓	✓	✓	✓	✓	✓					

HWg XML Devices

SensDesk Technology

✓ – *available*

✓ – *available on request*

✓ – *available through SensDesk.com and 3rd party portals*

* – *to send Alert SMS & Calls you will need HWg-SMS-GW3 (LTE) device on LAN or connect the device to the SensDesk.com service via Internet.*