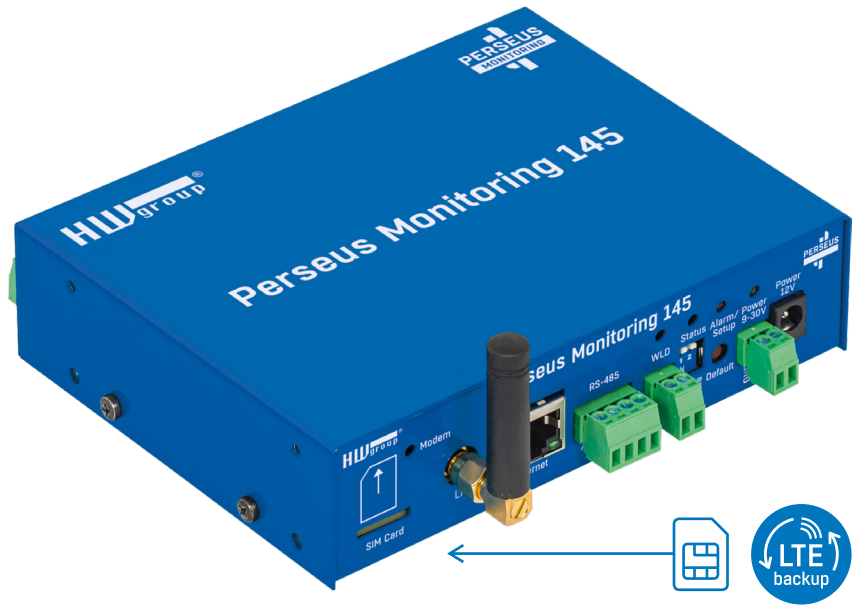# Perseus Monitoring 145

Perseus Monitoring 145 is a solution for remote monitoring on site with or even without LAN, there is an LTE modem for connectivity backup.
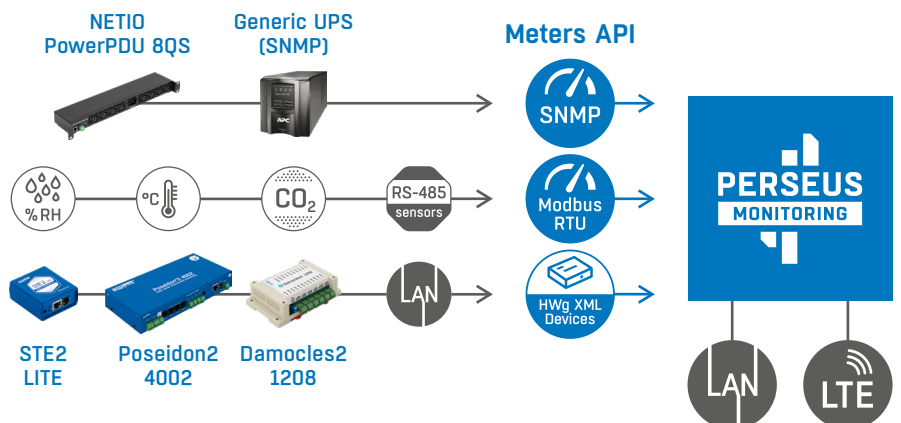

This device combines data from external physical sensors/detectors with data from other HWg devices connected via LAN. Local conditions, Lua scripting, calendar or periodic scheduler help to analyse the measured data.
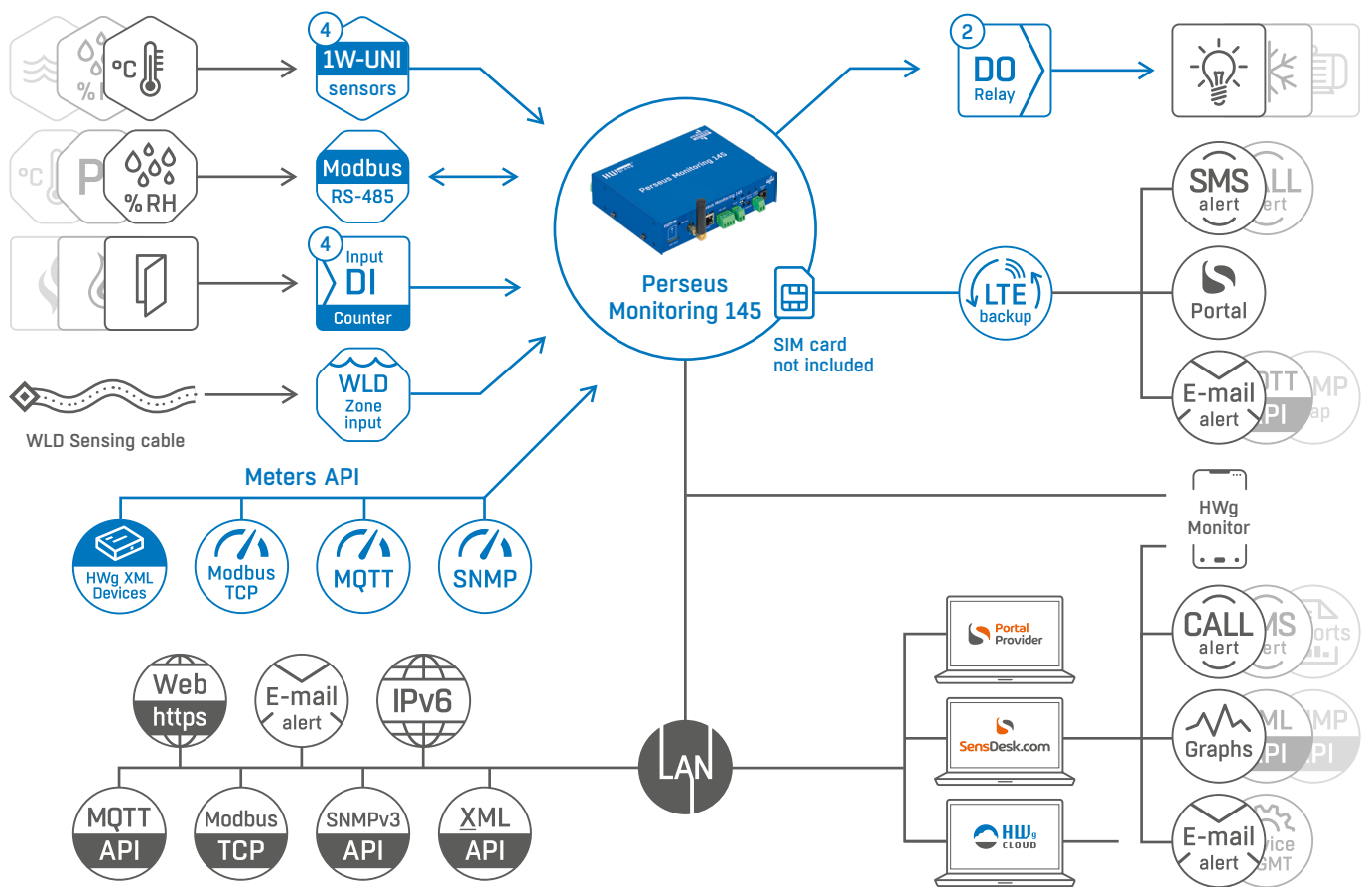
The alert situation can be indicated locally by switching DO (relay outputs), sent from the device as standalone alerts (SMS, Call, Email) or analyzed & alerted from the Portal (SensDesk Technology) with Graphs, Virtual sensors, Device Invalid alerts, PDF reports or Portal account open API (SNMP/XML). Perseus device can also individually share all measured values via the Open API (SNMP, MQTT, Modbus/TCP, XML)

External sensors can be connected via 4× RJ11 ports (1W-UNI sensors from HW group) or via RS-485 (Modbus/RTU sensors). 4× DI (Digital Inputs) can be used to connect detectors (open/closed contacts). 2× DO (Relay outputs) can be controlled via the device's interface or switched according to the value of selected sensor/detector.

Meters API is a unique feature of Perseus products – reading values from external LAN devices. This means that Perseus can connect via LAN to other devices on the same network and analyse their sensor data.

Internal LTE modem allows for backup connectivity to the Portal, as well as SMS and Call alerts. The Perseus 145 internal LTE modem can also be configured as an SMS gateway for other HW group devices.

Features

LTE — Integrated LTE modem for backup connectivity and SMS/Call alerts

HWg XML Devices — Meters API – ability to work with other HWg devices

Modbus RTU — Support for 3rd party sensors

Conditions & Actions — Variables can have multiple conditions and actions

Scheduler — Local calendar based scheduler

WLD Zone input — WLD zone input for the sensing cable

Radius protocol — 802.1X central security management

Lua — Local custom scripts in Lua

Templates — Templates repository for 3rd party sensors

x+1=z Calculation Formula — Converts variable from one unit into another

NETIO PowerPDU 8QS — Generic UPS (SNMP) — **Meters API** — SNMP

%RH — °C — CO_2 — RS-485 sensors — Modbus RTU

STE2 LITE — Poseidon2 4002 — Damocles2 1208 — LAN — HWg XML Devices

PERSEUS MONITORING — LAN — LTE

Typical applications

- Remote machine / technical room monitoring
- Remote environmental monitoring of warehouse / storage spaces
- Remote site data concentrators of all local sensors / meters
- Remote base transceiver station monitoring

Alerting options

A typical application example is monitoring temperatures in a remote warehouse with freezers. There are 4 temperature sensors (fridge), up to 20 m 1W-UNI physically connected to Perseus 145. External UPS with SNMP support can be monitored by SNMP (battery status).

From simple high temperature alarms to advanced alerts (2 out of 5 sensors exceeded limit or are inaccessible, send the alert to a recipient according to internal scheduler configuration).

Features	
Alerts	SNMP trap, email, SMS / Calls
LTE	Global
Open API	SNMP, XML, Modbus/TCP, MQTT
Professional product	IPv6, SNMP Traps, SNMPv3
Security	Radius - IEEE 802.1X, Admin and user accounts, HTTPs (customer certificate)

Technical specifications	
Ethernet	RJ45 (100BASE-T)
Power	9-30V (12V, 1.5A)
Operating temperature	-30 °C to 60 °C (-22 °F to 140 °F)
Mechanical	Metal case, 35×111×140 mm
Warranty	24 months

Interfaces	
Sensors	4× RJ11 port – 1-Wire / 1-Wire UNI
Meters API	HWg XML, Modbus/TCP, MQTT, SNMP
RS-485 (Modbus/RTU)	1× 4-pin terminal block (with 12V)
WLD	1 zone for external Water Leak Detection sensing cable
DO (Digital Outputs)	2× DO (relays)
DI (Digital Inputs)	4× DI (dry contact)

Software / Services	
SensDesk.com	Online remote monitoring service. Graphs, alerts, device management.
Portal on premise	Standalone individual SensDesk installation
Portal Providers	Several SensDesk Technology portals
HWg-cloud.com	Free of charge portal service
HWg Monitor	Smart phone application (iOS, Android)
Other software	3rd party software, HWg-SDK

Standalone Monitoring