proudly presents HW group
Environment Monitoring Systems

Jens Albrecht, B.S. EE
CEO
About HW group s.r.o company

- HW group produces **IP sensors & M2M Monitoring solutions**
- HW group is an original manufacturer from Prague, Czech Republic
- HW group products are distributed in 37 countries
Who are our customers?

**HW group products enable IT people to do the job of someone else in a better way (the IT way).**

_Someone else used to be Industrial business, Security or other specialised companies._

- Energy metering
- Water Leaks monitoring
- HVAC control & monitor
- Datacentres monitoring
- Security & I/O integration
- BMS (Building Management Systems)
- Industrial ACS (Access Control System)
• 1 device: 1 job = HWg-STE, HWg-WLD
• 1 device: multi-job = Poseidon, Damocles, Ares
IP Monitoring solutions are easy to install and easy to use in your daily business.

1) HW group solutions and products are IT friendly.

2) With HW group products you can always start with something small and simple. And later expand it.

3) HW group offers products for high added value services. Typically unique on the market.
HWg Monitoring 1,2,3,4

(1) Data input
- Measure \(\text{\degree C}, V, \text{mA, \%RH, Pa, Hz, m}\)
- Input / Output

(2) Processing
- Log, Analyse
- Alert
- Several models

(3) M2M transfer
- HWg SDK
- XML / SNMP
- GPRS / SMS

(4) SW Application
- Graph, Excel
- Relay, Camera
- Alarming
HWg offers Small / Big versions

- Independent, one device
- No server / software required
- Simple to use..

Standalone

Identical products

- Scalable system of many different devices
- Open for 3rd party SW
- SDK & Documentation

Enterprise
# HW group monitoring system

<table>
<thead>
<tr>
<th>Sensors</th>
<th>Devices</th>
<th>Usage methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="temp_icon" alt="Temp" /></td>
<td><img src="devices_img" alt="Devices" /></td>
<td>1) <strong>Web + Email</strong></td>
</tr>
<tr>
<td><img src="humidity_icon" alt="Humidity" /></td>
<td></td>
<td>2) <strong>SNMP interface</strong> – general software (Nagios, HW OpenView, Cacti, IBM Tivoli, ..)</td>
</tr>
<tr>
<td><img src="voltage_icon" alt="Voltage" /></td>
<td></td>
<td>3) <strong>HWg-PDMS software</strong></td>
</tr>
<tr>
<td><img src="current_icon" alt="Current" /></td>
<td></td>
<td>4) <strong>Modbus/TCP</strong> or <strong>SCADA</strong></td>
</tr>
<tr>
<td><img src="lux_icon" alt="Lux" /></td>
<td></td>
<td>5) <strong>Android</strong> or <strong>iPhone</strong> display</td>
</tr>
<tr>
<td><img src="power_icon" alt="Power" /></td>
<td></td>
<td>6) <strong>Programmed applications</strong> (SDK)</td>
</tr>
<tr>
<td><img src="amperage_icon" alt="Amperage" /></td>
<td></td>
<td>7) <strong>SensDesk portal</strong> – web service</td>
</tr>
</tbody>
</table>
Market segments

- IT SOHO (Small Office / Home Office)
- IT in Small Companies
- Retail (Shops)

Email & SMS

- Datacenters
- Carriers (Telco / GSM operators)
- Cable TVs
- Banks

SNMP

- Warehouses
- Hospitals
- Factories
- Buildings

SCADA

- Banks
- Buildings
- Hospitals
- Warehouses
- Datacenters
- Supermarkets

IP CCTV

IT

Industrial
HWg is unique on the market

**Wide range of sensors**
From IT sensors to high precision **Industrial standard sensors**

**All in ONE SYSTEM**

With HW group sensors, you can cover simple IT solutions (1 sensor) or even big enterprise solutions (1000 sensors) with one system only.
**HW group & Software options**

*HWg IP Sensors can be connected to any software. Sensor values written on a piece of paper are useless.*

**HWg Software**

- Original HWg software for easy start and for most common usage.
  - Easy to use
  - Windows applications
  - Free trial versions
  - HWg-PDMS
  - HWg-PD Trigger
  - HWg-DCD
  - HWg-VSP

**Generic SW (3rd party)**

- Standard software applications based on generic protocols:
  - SNMP (NMS)
  - Modbus/TCP (SCADA)
  - XML
  - Nagios / Zabbix / Cacti
  - HP OpenView / IBM Tivoli
  - Microsoft MSC Essentials
  - Wonderware SCADA

**Customized Software**

- HW group provides **SDK** (Software Development Kit) for free.
  - Simplifies integration with any software that you can write or update.
  - Plenty of programming languages supported
  - Ready for use by System Integrators
### Applications in market segments

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pharmacies &amp; hospitals</strong></td>
<td>Monitoring temperature of stored medicinals (blood) in fridges.</td>
</tr>
<tr>
<td><strong>Servers overheating</strong></td>
<td>IP Thermometer with Email alert when temperature is too high.</td>
</tr>
<tr>
<td><strong>Ping monitoring</strong></td>
<td>Standalone functionality monitoring with PING or http requests. Failure = restart unit or connection.</td>
</tr>
<tr>
<td><strong>Water leaks detector over IP</strong></td>
<td>Detect water leaking from cooling or water pipelines. Easy to install detecting cable.</td>
</tr>
<tr>
<td><strong>Access system for cabinets (19” racks)</strong></td>
<td>Electronic swing-handles with RFID readers. Only authorized staff can open each cabinet.</td>
</tr>
<tr>
<td><strong>Rack / Telco site monitoring</strong></td>
<td>Complete remote monitoring for cabinets &amp; telecommunication remote sites.</td>
</tr>
<tr>
<td><strong>Building / Warehouse</strong></td>
<td>Energy, temperature, humidity, air-conditioning, door monitoring for various areas.</td>
</tr>
<tr>
<td><strong>IP Camera + sensors</strong></td>
<td>Dry contacts status (doors) monitoring + outputs connected to IP video surveillance system.</td>
</tr>
<tr>
<td><strong>Serial printer replacement over IP</strong></td>
<td>Replace all serial printers in remote offices with IP based devices. Printed data are centrally collected to text files with the PS Eye application.</td>
</tr>
<tr>
<td><strong>HWg-Juno – I/O for IP CCTV</strong></td>
<td>Special product line for IP Video systems.</td>
</tr>
</tbody>
</table>
HWg-STE: Web SNMP Thermometer

- Very simple WEB thermometer
- Max 2 sensors (Temperature / Humidity)
- WEB, SNMP, Email alarms
- Retail package includes a temperature sensor (3m), power adaptor and Windows SW license (HWg-PDMS)
- Mobile WEB browsers supported
HWg-Ares: GSM/GPRS thermometer

- GSM based **IP sensor**
- Internal battery (8 hours)
- DI / DO / 1-Wire sensors
- FOTA (Firmware Over The Air) / USB configuration
- Ready for project with hundreds units in one LAN & GSM system
- Free central software / Cloud (web portal) / Nagios available
**HWg-PWR: M-Bus energy monitoring**

- **IP gateway for generic M-Bus meters**
  - Electricity meters, Water & Gas meters, Heating Calorimeters

- Can be used as a **fully standalone** solution or in enterprise system.
  - No special software required. Can be used with email report only

- **Models:** HWg-PWR 3 / 12 / 25 (M-Bus meters)
Water detected anywhere on the 85m length of sensing cable

States: (0) Dry cable / (1) Flooded / (2) Disconnected cable

With the 2D WLD detection system, you are buying the time. Do you want to fix few drops of the water or 60cm damage?
Poseidon 4002: 19” Cabinets monitoring

- 19” cabinet montage
- 2x Relay output
- 6x DI Dry contact input
- 4x 1-Wire UNI (12 sensors)
  Voltage, Current (AC/DC), Light, AirFlow, ..
- GSM modem (SMS GW - Client/Server)
- Web, SNMP, Modbus/TCP, Communication monitor
Poseidon2 family overview

Poseidon2:
- Web interface
- Logger
- SNMP, Modbus/TCP, XML, ..
- Remote SMS gateway
- All sensors supported..

Poseidon2 3266
*Most popular model*
- 4x DI (Dry Contacts)
- 8x 1-Wire UNI sensors

Poseidon2 3268
- 2x DO relays
- 4x DI (Dry Contacts)
- 8x 1-Wire UNI sensors

Poseidon2 3468
- DIN rail montage
- 2x relays (230V/16A)
- 4x DI (Dry Contacts)
- 8x 1-Wire UNI sensors
- 48V DC power

Poseidon2 4002
- 19" rack monitoring
- SMS GateWay
- DI, DO, 1-Wire UNI
- RS-232 (GSM modem)
- RS-485 sensors (26)
Poseidon sensors & detectors

Temperature, Humidity

Current, Voltage, Motion, ..

Smoke, Water leaks, Door position, ..
Send all SMS alerts via one GSM modem. No software, One modem, One SIM card.
HW group software applications

**HWg-PDMS**

- Central database up to 500 devices.
- Polling x Email data input
- Graphs
- MS Excel export

**PD Trigger**

- Events management
- Alerts you by SMS or Email when IP sensor not found or value is out of limit.
- SNMP Traps management
SensDesk: Online cloud portal

Sending values periodically every 15 minutes.

SensDesk alarm range
Alarming from the SensDesk portal.

HWg-STE plus
Fast changes sent within 1 second.

23°C

38°C
You can define group of devices, which you want to see on the Dashboard.

Choose for each sensor one of the gauge types. Require Adobe Flash player.

For DI (detectors) you can name and define alarm state.
Damocles: I/O over LAN

I/O over Ethernet, no sensors...

**Damocles2 2404**
- 4x DO (Relays)
- 24x DI (Dry Contacts)

**Damocles2 1208**
- 8x DO (Open Collector)
- 12x DI (Dry Contacts)

**Damocles2 MINI**
- 2x DO (Relays)
- 4x DI (Dry Contacts)

32bit pulse counter on each DI – usable as energy meter for S0
Serial Port & I/O <--> Ethernet

**IP Relay ER02b**
DIN montage, 2 relay outputs 110/230V, 2x DI
- **Full RS-232/485** (max 115.200 Bd)
- **2x DI** (Dry Contact)
- **2x DO** (Relay 230V/16A)
- WEB, Modbus/TCP, Telnet protocol
- Box-2-Box mode (“tunnel mode” for I/O and serial)

**I/O Controller 2**
Remote I/O control & full serial port Terminal server
- **Full RS-232/485** (max 115.200 Bd)
- **8x DI** (Dry Contact)
- **8x DO** (Open Collector)
- WEB, Modbus/TCP, Telnet protocol
- Box-2-Box mode (“tunnel mode” for I/O and serial)
IP WatchDog: Ping failure detector

**IP Watchdog Lite**
- 2x Relay 1A/30V
- PING In/Out

**IP Watchdog WR02a**
- 2x Relay 16A/230V
- PING In/Out
- Web In/Out
- RS-232

- **IP failure detector**: LAN switch / IP cameras / Connection
- **Two independent channels**: 2 relays
- In case of no PING answer Watchdog restarts the frozen device or switches the backup connection on.
Your reseller for Switzerland

• Buy now:
  • HWg-STE-Kit for CHF 197.-
  • Additional temperature sensor CHF 55.-
  • Additional humidity sensor CHF 105.-
  • Order by email to insinova@insinova.ch

• Prices: Excl. VAT

insula nova ag
Jens Albrecht
Sumpfstrasse 32
CH-6312 Steinhausen
Tel. 041 748 72 00
Fax 041 748 72 01
www.temperatur-sensor.ch