



Promo materials

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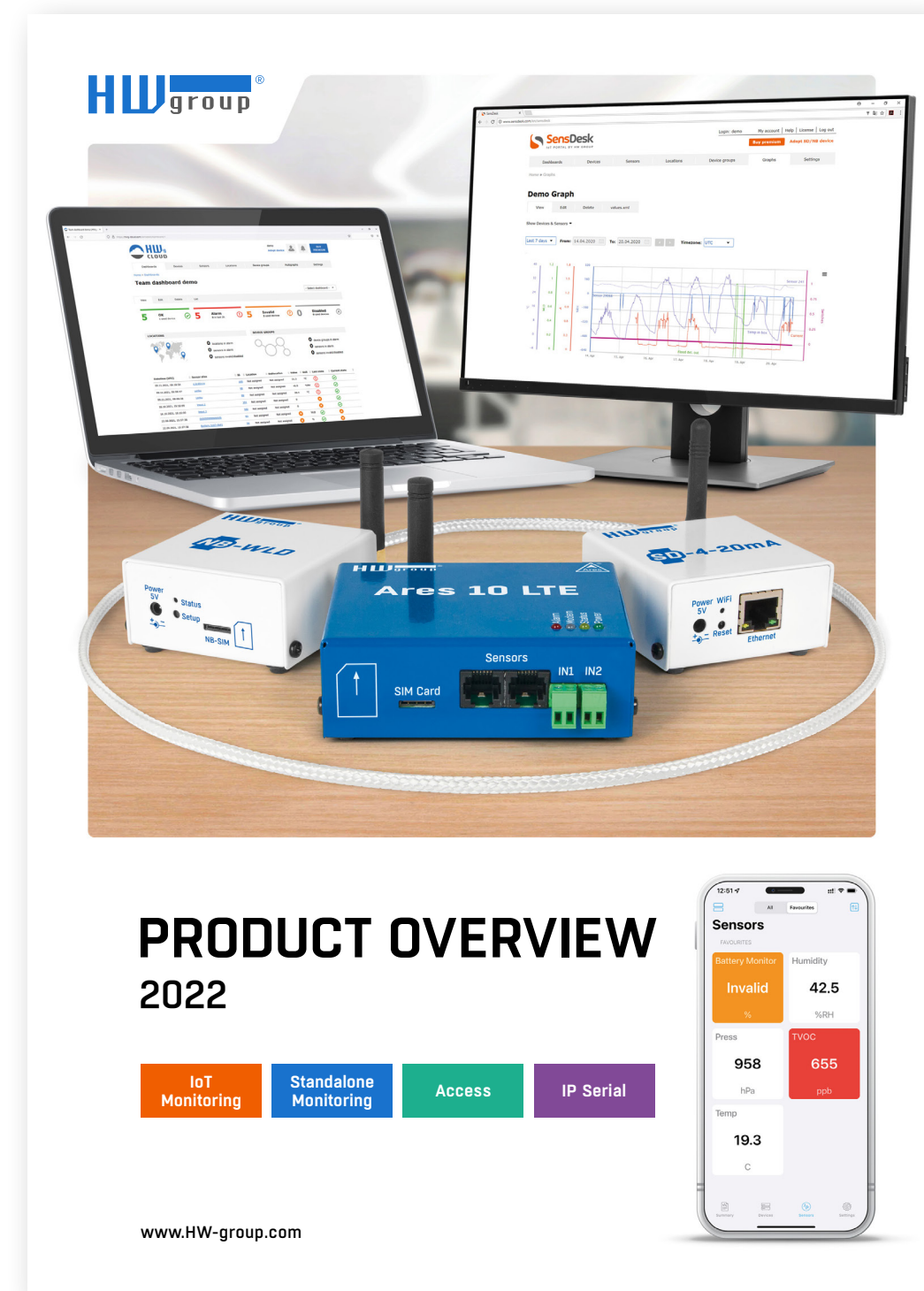
Portfolio

- Overview Catalog
- Flyers
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- Roll-ups



Overview Catalog (210 × 297 mm)

Product Overview 2022



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64 pages

Flyer A4 (210 × 297 mm)

Poseidon2 3266

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Poseidon2 3266

Cost-effective model for remote monitoring of sensors and detectors

- 1-Wire UNI sensors
- Digital Input
- SNMP trap
- E-mail notification
- MQTT protocol

Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- UPS / back-up generator monitoring
- Industrial applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Poseidon2 3266 supports up to 8 sensors connected over 1-Wire UNI / 1-Wire and up to 4 detectors connected to digital inputs.

A built-in web server is used for configuring. The device can be monitored remotely over the internet using the free SensDesk portal in combination with the SensDesk Mobile application for iOS and Android. It works with HWg-PDMS and HWg-Trigger.

Poseidon2 devices are designed to monitor and control sensors and digital I/O over the network using secure M2M protocols (HTTPS, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Poseidon2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

A sensor value out of a set safe range as well as a DI state change sends an alert by e-mail, SMS, SNMP Trap, or activates a remote relay at another Poseidon2 or Damocles2 unit.	Compatible with a wide range of third party SW (SCADA etc.).	With the HWg-PDMS software, SO pulses can be converted to cost per time period and exported to MS Excel.
Examples for programmers on using the product are available in the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more).	Connected via LAN. Configuration via built-in web server.	
For Ring or SMS alarm use the HWg-Trigger software (external GSM modem required), or a HWg-SMS-GW3 gateway in the same LAN.	All inputs feature 32-bit pulse counters that retain their status even after power failure.	MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services.

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Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- UPS / back-up generator monitoring
- Industrial applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Ethernet

LAN	RJ45 (DDBASE-Tx) - 10/100 Mbps
Supported protocols	MQTT (IoT), SNMPv1, SNMPv3, HWg-PUSH, Modbus/TCP, HTTPs, IPv6, XML, netGSM

Inputs

Sensors	8x 1-Wire UNI/1-Wire
Detectors	4x digital input with SO pulse counters

Dimensions / mass

Dimensions	100x25x90 mm
Mass	300g
Housing	Metal

Logger

Internal memory	250,000 records
Recorded values	DI, DO
Power	9-30 V DC, (PoE optional)

User interface

Built-in Web server	Device configuration and data readings
SensDesk Portal / SensDesk Mobile application	Cloud portal for data readings and alerting
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK

Poseidon2 model comparison

Selected features	4002	3468	3268	3266	
Inputs	1-Wire UNI	16	8	8	8
	DI	12	4	4	4
Outputs	Relay 250 V/10A	-	2	-	-
	Relay 50 V/1A	4	-	2	-
	VDD	8	8	8	8
Power	9-30V	✓	✓	✓	✓
	-48V	-	✓	-	-
Connected	PoE	opt.	✓	opt.	opt.
	LAN	✓	✓	✓	✓
	RS-232	✓	-	-	-

Configuration interface

Versions and related products

- Poseidon2 3266 stand-alone device
- Poseidon2 3266 TSet includes a temperature and humidity sensor, door contact and a power adaptor
- Poseidon2 4002 TSet includes two temperature sensors, door contact and a power adaptor
- Poseidon2 3468 TSet includes a temperature sensor and a power adaptor
- Poseidon2 3268 TSet includes a temperature sensor, door contact and a power adaptor
- HWg-SMS-GW3 Set SMS gateway for ring and SMS alerting for LAN. Includes antenna and a power adaptor

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Poseidon2 3268

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Poseidon2 3268

Remote monitoring of sensors and detectors and control of relay outputs

- 1-Wire UNI sensors
- Digital Input
- Relay output
- Virtual output
- SNMP trap
- E-mail notification
- MQTT protocol

Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- Remote I/O control and monitoring over the Ethernet
- UPS / back-up generator monitoring
- Industrial applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Poseidon2 3268 supports up to 8 sensors connected over 1-Wire UNI / 1-Wire 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 (VDD) at remote Poseidon2 or Damocles2 units (M2M).

A built-in web server is used for configuring. The device can be monitored remotely over the internet using the free SensDesk portal in combination with the SensDesk Mobile application for iOS and Android. It works with HWg-PDMS and HWg-Trigger.

Poseidon2 devices are designed to monitor and control sensors and digital I/O over the network using secure M2M protocols (HTTPS, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Poseidon2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

Connected via LAN. Configuration via built-in web server.	All inputs feature 32-bit pulse counters that retain their status even after power failure.	Compatible with a wide range of third party SW (SCADA etc.).
A sensor value out of a set safe range as well as a DI state change sends an alert by e-mail, SMS, SNMP Trap, or activates a remote relay at another Poseidon2 or Damocles2 unit.	With the HWg-PDMS software, SO pulses can be converted to cost per time period and exported to MS Excel.	MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services.
For Ring or SMS alarm use the HWg-Trigger software (external GSM modem required), or a HWg-SMS-GW3 gateway in the same LAN.	Examples for programmers on using the product are available in the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more).	Virtual Digital Outputs (VDD) can be mapped to physical digital outputs (relays) of other Poseidon2 or Damocles2 units on the same LAN.

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Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- Remote I/O control and monitoring over the Ethernet
- UPS / back-up generator monitoring
- Industrial applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Ethernet

LAN	RJ45 (DDBASE-Tx) - 10/100 Mbps
Supported protocols	MQTT (IoT), SNMPv1, SNMPv3, HWg-PUSH, Modbus/TCP, HTTPs, IPv6, XML, netGSM

Inputs

Sensors	8x 1-Wire UNI/1-Wire
Detectors	4x digital input with SO pulse counters

Outputs

Digital Outputs (DO)	2x Relay Output 50 V/1A
Virtual Digital Outputs (VDD)	8x (can be mapped to another Poseidon2 or Damocles2)

Dimensions / mass

Dimensions	100x25x90 mm
Mass	300g
Housing	Metal

Logger

Internal memory	250,000 records
Recorded values	DI, DO
Power	9-30 V DC, (PoE optional)

User interface

Built-in Web server	Device configuration and data readings
SensDesk Portal / SensDesk Mobile application	Cloud portal for data readings and alerting
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK

Poseidon2 model comparison

Selected features	4002	3468	3268	3266	
Inputs	1-Wire UNI	16	8	8	8
	DI	12	4	4	4
Outputs	Relay 250 V/10A	-	2	-	-
	Relay 50 V/1A	4	-	2	-
	VDD	8	8	8	8
Power	9-30V	✓	✓	✓	✓
	-48V	-	✓	-	-
Connected	PoE	opt.	✓	opt.	opt.
	LAN	✓	✓	✓	✓
	RS-232	✓	-	-	-

Configuration interface

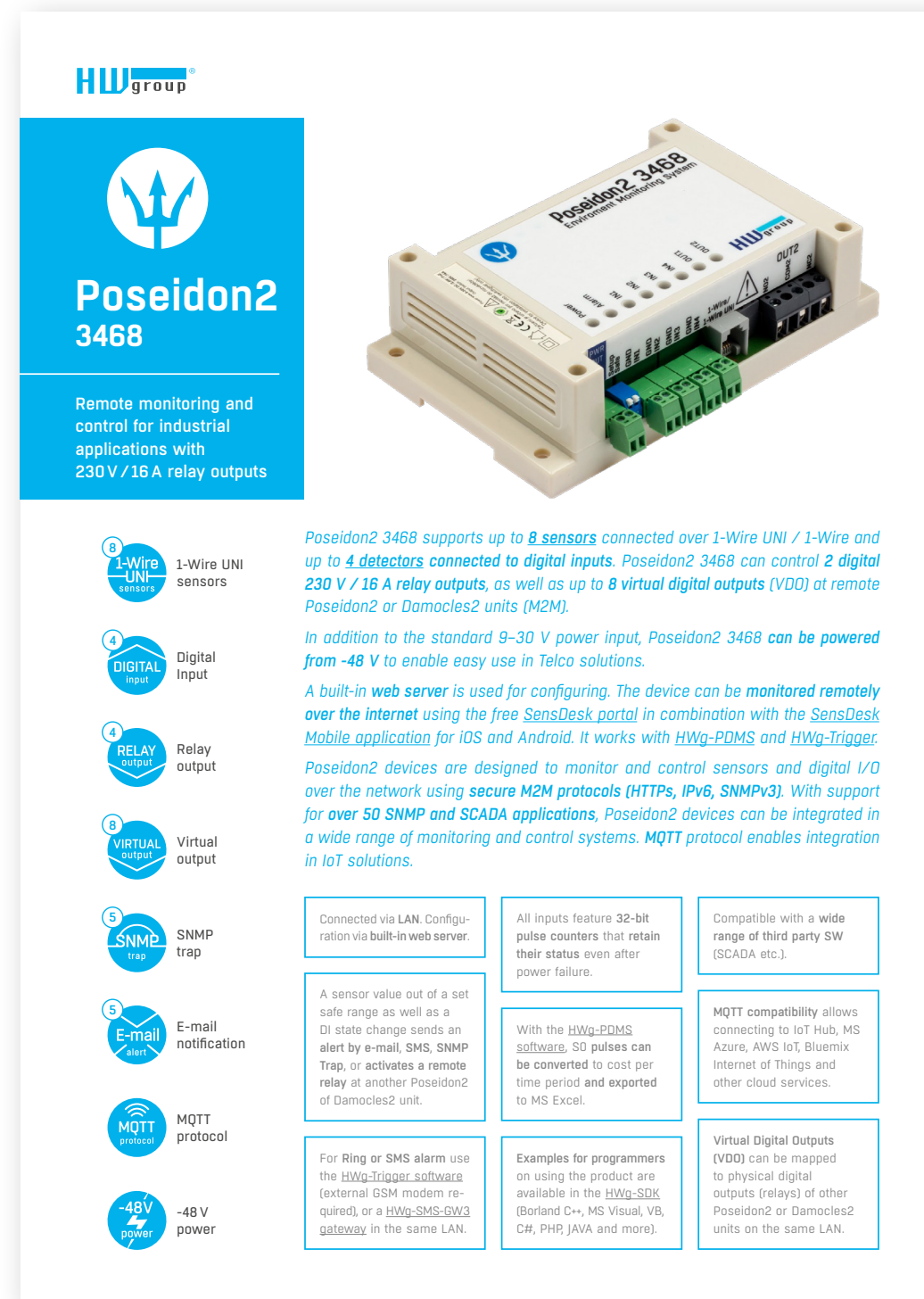
Versions and related products

- Poseidon2 3268 stand-alone device
- Poseidon2 3268 TSet includes a temperature sensor, door contact and a power adaptor
- Poseidon2 4002 TSet includes two temperature sensors, door contact and a power adaptor
- Poseidon2 3468 TSet includes a temperature sensor and a power adaptor
- Poseidon2 3268 TSet includes a temperature and humidity sensor, door contact and a power adaptor
- HWg-SMS-GW3 Set SMS gateway for ring and SMS alerting for LAN. Includes antenna and a power adaptor

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Flyer A4 (210 × 297 mm)

Poseidon2 3468



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Poseidon2 3468

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

- 1-Wire UNI sensors
- Digital Input
- Relay output
- Virtual output
- SNMP trap
- E-mail notification
- MQTT protocol
- 48 V power

Poseidon2 3468 supports up to 8 sensors connected over 1-Wire UNI / 1-Wire 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).

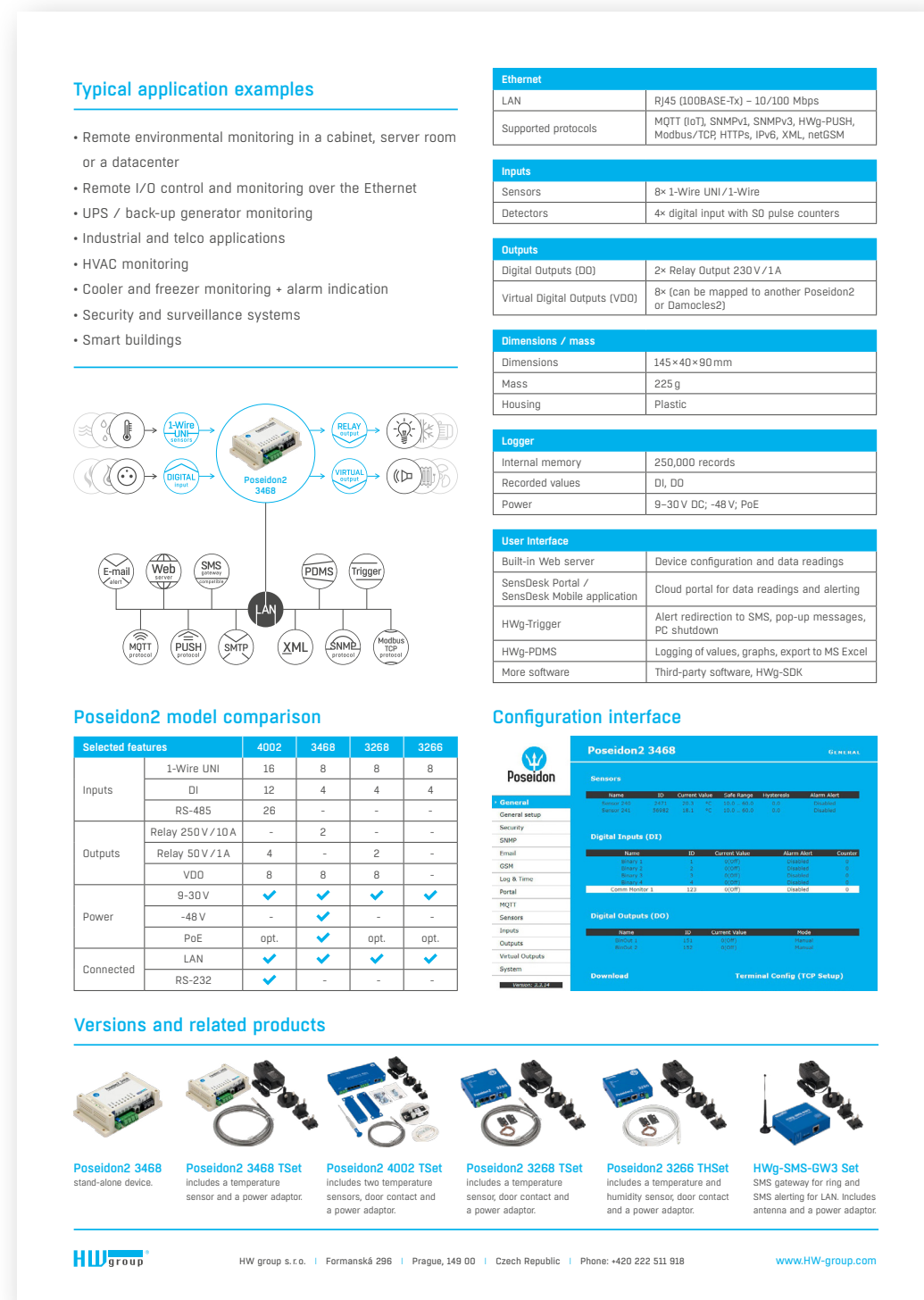
In addition to the standard 9-30 V power input, Poseidon2 3468 can be powered from -48 V to enable easy use in Telco solutions.

A built-in web server is used for configuring. The device can be monitored remotely over the internet using the free SensDesk portal in combination with the SensDesk Mobile application for iOS and Android. It works with HWg-PDMS and HWg-Trigger. Poseidon2 devices are designed to monitor and control sensors and digital I/O over the network using secure M2M protocols (HTTPs, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Poseidon2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

Connected via LAN. Configuration via built-in web server.	All inputs feature 32-bit pulse counters that retain their status even after power failure.	Compatible with a wide range of third party SW (SCADA etc.).
A sensor value out of a set safe range as well as a DI state change sends an alert by e-mail, SMS, SNMP Trap, or activates a remote relay at another Poseidon2 or Damocles2 unit.	With the HWg-PDMS software, 50 pulses can be converted to cost per time period and exported to MS Excel.	MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services.
For Ring or SMS alarm use the HWg-Trigger software (external GSM modem required), or a HWg-SMS-GW3 gateway in the same LAN.	Examples for programmers on using the product are available in the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more).	Virtual Digital Outputs (VDO) can be mapped to physical digital outputs (relays) of other Poseidon2 or Damocles2 units on the same LAN.

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Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- Remote I/O control and monitoring over the Ethernet
- UPS / back-up generator monitoring
- Industrial and telco applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Ethernet	LAN: RJ45 (100BASE-Tx) - 10/100 Mbps
Supported protocols	MQTT (opt), SNMPv1, SNMPv3, HWg-PUSH, Modbus/RTU, HTTPs, IPv6, XML, netSMA
Inputs	Sensors: 8x 1-Wire UNI / 1-Wire
Detectors	4x digital input with SD pulse counters
Outputs	Digital Outputs (DO): 2x Relay Output 230 V / 1A
Virtual Digital Outputs (VDO)	8x (can be mapped to another Poseidon2 or Damocles2)
Dimensions / mass	Dimensions: 145 x 40 x 90 mm
Mass	225 g
Housing	Plastic
Logger	Internal memory: 250,000 records
Recorded values	DI, DO
Power	9-30V DC; -48 V; PoE
User Interface	Built-in Web server: Device configuration and data readings
SensDesk Portal / SensDesk Mobile application	Cloud portal for data readings and alerting
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK

Poseidon2 model comparison

Selected features	4002	3468	3268	3266	
Inputs	1-Wire UNI	16	8	8	8
	DI	12	4	4	4
	RS-485	26	-	-	-
	Relay 250 V / 1A	-	2	-	-
Outputs	Relay 50 V / 1A	4	-	2	-
	VDO	8	8	8	8
	9-30 V	✓	✓	✓	✓
Power	-48 V	-	✓	-	-
	PoE	opt.	✓	opt.	opt.
	LAN	✓	✓	✓	✓
	Connected	RS-232	✓	-	-

Configuration interface

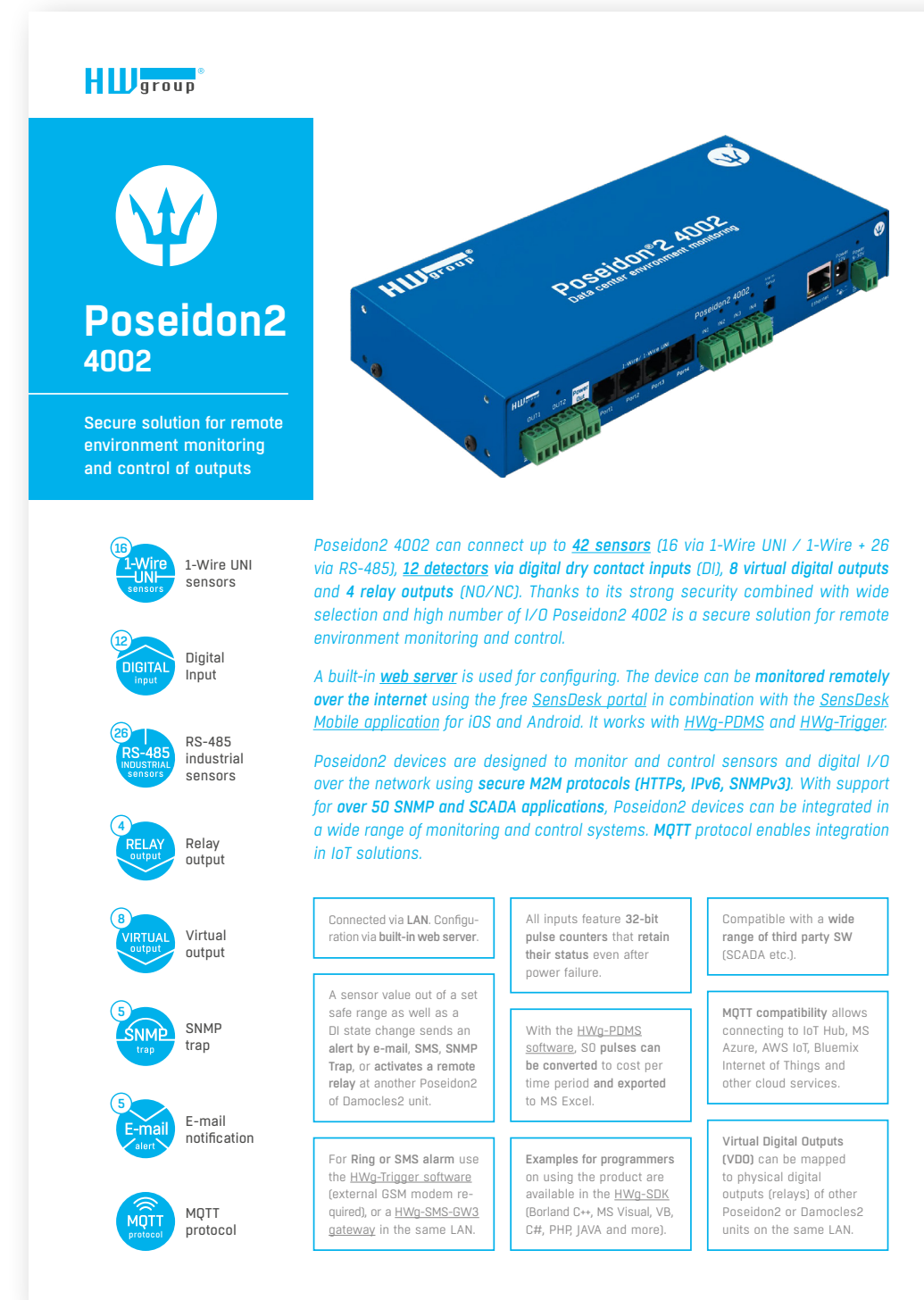
Versions and related products

- Poseidon2 3468: standard device
- Poseidon2 3468 TSet: includes a temperature sensor and a power adaptor
- Poseidon2 4002 TSet: includes two temperature sensors, door contact and a power adaptor
- Poseidon2 3268 TSet: includes a temperature sensor, door contact and a power adaptor
- Poseidon2 3266 TSet: includes a temperature and humidity sensor, door contact and a power adaptor
- HWg-SMS-GW3 Set: SMS gateway for ring and SMS alerting for LAN. Includes antenna and a power adaptor

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Poseidon2 4002



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Poseidon2 4002

Secure solution for remote environment monitoring and control of outputs

- 1-Wire UNI sensors
- Digital Input
- RS-485 industrial sensors
- Relay output
- Virtual output
- SNMP trap
- E-mail notification
- MQTT protocol

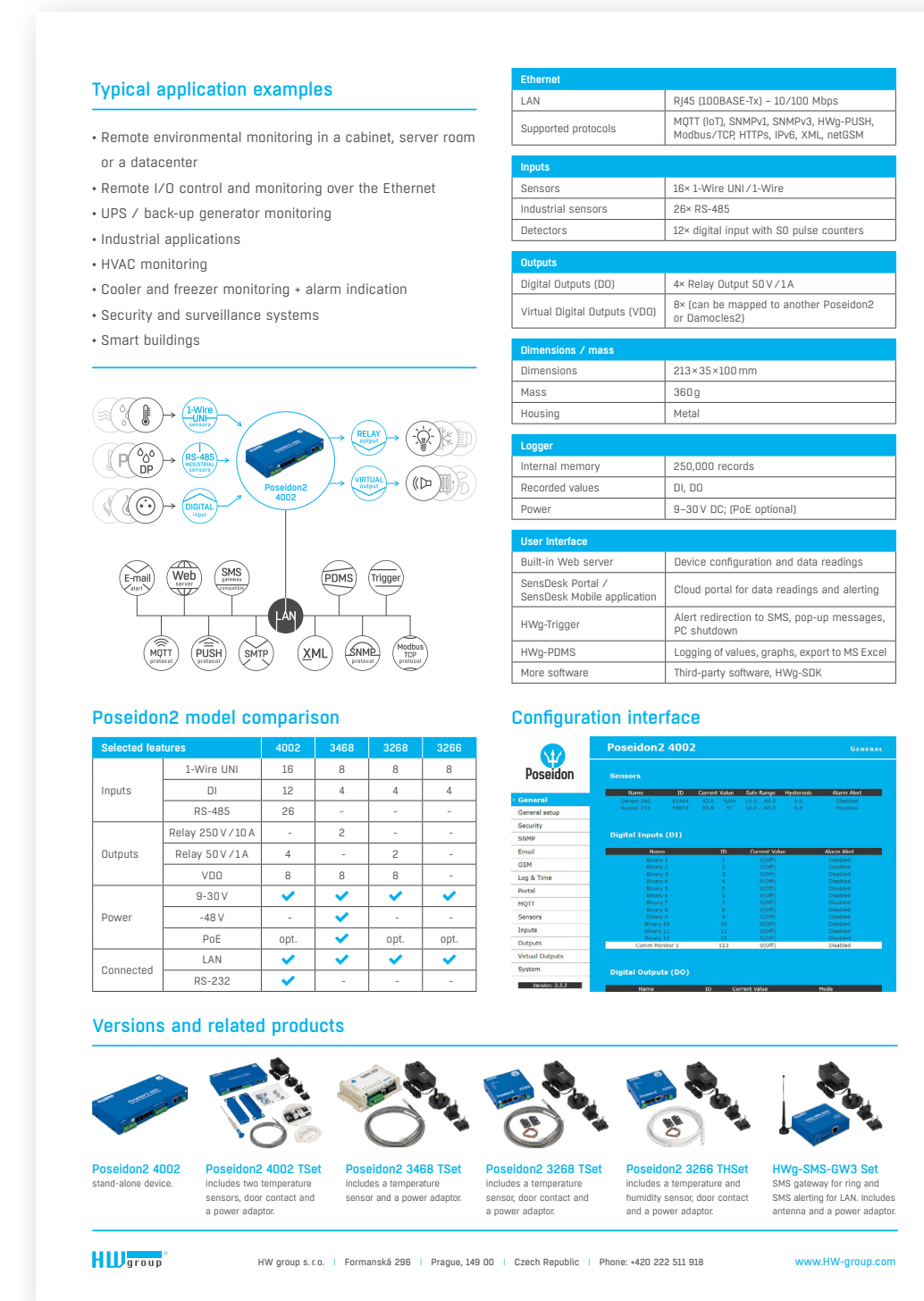
Poseidon2 4002 can connect up to 42 sensors (16 via 1-Wire UNI / 1-Wire + 26 via RS-485), 12 detectors via digital dry contact inputs (DI), 8 virtual digital outputs and 4 relay outputs (NO/NC). Thanks to its strong security combined with wide selection and high number of I/O Poseidon2 4002 is a secure solution for remote environment monitoring and control.

A built-in web server is used for configuring. The device can be monitored remotely over the internet using the free SensDesk portal in combination with the SensDesk Mobile application for iOS and Android. It works with HWg-PDMS and HWg-Trigger. Poseidon2 devices are designed to monitor and control sensors and digital I/O over the network using secure M2M protocols (HTTPs, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Poseidon2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

Connected via LAN. Configuration via built-in web server.	All inputs feature 32-bit pulse counters that retain their status even after power failure.	Compatible with a wide range of third party SW (SCADA etc.).
A sensor value out of a set safe range as well as a DI state change sends an alert by e-mail, SMS, SNMP Trap, or activates a remote relay at another Poseidon2 or Damocles2 unit.	With the HWg-PDMS software, 50 pulses can be converted to cost per time period and exported to MS Excel.	MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services.
For Ring or SMS alarm use the HWg-Trigger software (external GSM modem required), or a HWg-SMS-GW3 gateway in the same LAN.	Examples for programmers on using the product are available in the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more).	Virtual Digital Outputs (VDO) can be mapped to physical digital outputs (relays) of other Poseidon2 or Damocles2 units on the same LAN.

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Typical application examples

- Remote environmental monitoring in a cabinet, server room or a datacenter
- Remote I/O control and monitoring over the Ethernet
- UPS / back-up generator monitoring
- Industrial applications
- HVAC monitoring
- Cooler and freezer monitoring + alarm indication
- Security and surveillance systems
- Smart buildings

Ethernet	LAN: RJ45 (100BASE-Tx) - 10/100 Mbps
Supported protocols	MQTT (opt), SNMPv1, SNMPv3, HWg-PUSH, Modbus/RTU, HTTPs, IPv6, XML, netSMA
Inputs	Sensors: 16x 1-Wire UNI / 1-Wire
Industrial sensors	26x RS-485
Detectors	12x digital input with SD pulse counters
Outputs	Digital Outputs (DO): 4x Relay Output 50 V / 1A
Virtual Digital Outputs (VDO)	8x (can be mapped to another Poseidon2 or Damocles2)
Dimensions / mass	Dimensions: 213 x 35 x 100 mm
Mass	380 g
Housing	Metal
Logger	Internal memory: 250,000 records
Recorded values	DI, DO
Power	9-30V DC; (PoE optional)
User Interface	Built-in Web server: Device configuration and data readings
SensDesk Portal / SensDesk Mobile application	Cloud portal for data readings and alerting
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK

Poseidon2 model comparison

Selected features	4002	3468	3268	3266	
Inputs	1-Wire UNI	16	8	8	8
	DI	12	4	4	4
	RS-485	26	-	-	-
	Relay 250 V / 1A	-	2	-	-
Outputs	Relay 50 V / 1A	4	-	2	-
	VDO	8	8	8	8
	9-30 V	✓	✓	✓	✓
Power	-48 V	-	✓	-	-
	PoE	opt.	✓	opt.	opt.
	LAN	✓	✓	✓	✓
	Connected	RS-232	✓	-	-

Configuration interface

Versions and related products

- Poseidon2 4002: stand alone device
- Poseidon2 4002 TSet: includes two temperature sensors, door contact and a power adaptor
- Poseidon2 3468 TSet: includes a temperature sensor and a power adaptor
- Poseidon2 3268 TSet: includes a temperature sensor, door contact and a power adaptor
- Poseidon2 3266 TSet: includes a temperature and humidity sensor, door contact and a power adaptor
- HWg-SMS-GW3 Set: SMS gateway for ring and SMS alerting for LAN. Includes antenna and a power adaptor

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Flyer A4 (210 × 297 mm)

Damocles2 MINI

Damocles2 MINI
Smart I/O controlled over a LAN

Damocles2 MINI provides 4 digital dry contact inputs. All digital inputs feature 50 pulse counters with a memory to connect water, gas, electricity or other meters. Damocles2 MINI controls 2 digital relay outputs (DO). A built-in web server is used for configuring. The device can be monitored remotely over the Internet using the SensDesk portal or the SensDesk Mobile app. Damocles2 MINI is a compact Ethernet I/O device with enhanced IP security.

Damocles2 devices are designed to monitor and control digital I/O over the network using secure M2M protocols (HTTPs, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Damocles2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

Basic features of Damocles2 devices:

- Web-based configuration
- All inputs feature 32-bit pulse counters that retain their value even if the power fails
- Supports "SMS + Ring" function
- When a DI state changes, the device sends an e-mail, SMS, SNMP Trap, or activates a remote relay at another Damocles2 unit
- With the HWg-PDMS software, 50 pulses can be converted to cost per time period and exported to MS Excel
- MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services
- To send an alarm SMS whenever a DI state changes, use the HWg-Trigger software, or a HWg-SMS-GW gateway in the same LAN
- Examples for programmers on using the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more)
- Supports up to 8 virtual digital outputs (VDO) that can be mapped to physical digital outputs (relays) of other Damocles2 units on the network

Features:

- Digital inputs
- Relay outputs
- Pulse counter
- Web server
- E-mail notifications
- SNMP protocol
- MQTT protocol
- Modbus TCP protocol

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Typical application examples

- Remote equipment monitoring
- Smart buildings
- UPS monitoring
- Security and surveillance systems
- Alarm indication
- Energy consumption metering
- Connecting external inputs to SCADA systems

Typical application examples diagram: Shows connections for Electricity meter, Gas meter, Water meter, Motion detector, Water detector, Door contact, Gas detector, Smoke detector, Pulse counter, and Indicator.

Technical specifications:

Ethernet	
Interface	RJ45 (100BASE-T4) - 10/100 Mbps
Supported protocols	Modbus/TCP, HTTP, NTR, SMT, NetGSM, HWg-PUSH, SNMP, XML
SNMP compatibility	ver. 1, partial ver. 2, ver. 3
Digital Inputs (DI)	
Port	IL, IL2, IL3, IL4
Type	4x digital input (supports NO/NC Dry contact)
Pulse counter	4x 32-bit
Digital Outputs (DO)	
Type	OUT1, OUT2 / relay contacts (NC-COM-NO)
Max. load	Max. 2 A / 24V (2 A / 12V or 0.5 A / 48V)
Logger	
Internal memory	250,000 records
Recorded values	DL, DO
Power	9-30V DC
Supported software	
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK
Dimensions / mass	
Dimensions	106 × 31 × 84 mm
Mass	300 g

Configuration interface: Screenshot of the web-based configuration interface for Damocles2 MINI.

Main changes in the 2nd generation:

	1 st generation Damocles2	Damocles2 MINI
Extended IP Filter	✗	✓
SNMPv3	✗	✓
HWg-PUSH (SensDesk portal)	✗	✓
NetGSM (HWg-SMS-GW3)	✗	✓
Virtual Output (XML)	✗	✓
Pulse counter (50 pulse)	✗	✓
HTTPS	✗	✓
IPv6	✗	✓
MQTT (IoT portals)	✗	✓
Group Alarm	✓	✗

Versions and related products:

- Damocles2 MINI: 4x DI, 2x DO relay, stand-alone device
- Damocles2 MINI set: 4x DI, 2x DO relay, includes a power adapter
- Damocles2 1208 set: 12x DI, 8x DO OC, includes a power adapter
- Damocles2 2404 set: 24x DI, 4x DO relay, includes a power adapter
- HWg-SMS-GW3: GSM gateway for ring and SMS notification
- Back-Up UPS Lite: Backup power supply 12V, 1.3Ah

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Damocles2 1208

Damocles2 1208
Industrial I/O with enhanced IP security and OC outputs

Damocles2 1208 provides 12 digital dry contact inputs (DI). All digital inputs feature 50 pulse counters with a memory to connect water, gas, electricity or other meters. Damocles2 1208 controls 8 digital open collector outputs (DO). A built-in web server is used for configuring. The device can be monitored remotely over the Internet using the SensDesk portal or the SensDesk Mobile app. Damocles2 1208 is an Ethernet I/O device with enhanced IP security and an excellent cost per I/O pin ratio.

Damocles2 devices are designed to monitor and control digital I/O over the network using secure M2M protocols (HTTPs, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Damocles2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

Basic features of Damocles2 devices:

- Web-based configuration
- All inputs feature 32-bit pulse counters that retain their value even if the power fails
- Supports "SMS + Ring" function
- When a DI state changes, the device sends an e-mail, SMS, SNMP Trap, or activates a remote relay at another Damocles2 unit
- With the HWg-PDMS software, 50 pulses can be converted to cost per time period and exported to MS Excel
- MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services
- To send an alarm SMS whenever a DI state changes, use the HWg-Trigger software, or a HWg-SMS-GW gateway in the same LAN
- Examples for programmers on using the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more)
- Supports up to 8 virtual digital outputs (VDO) that can be mapped to physical digital outputs (relays) of other Damocles2 units on the network

Features:

- Digital inputs
- Open collector outputs
- Pulse counter
- Web server
- E-mail notifications
- SNMP protocol
- MQTT protocol
- Modbus TCP protocol

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Typical application examples

- Remote equipment monitoring
- Smart buildings
- UPS monitoring
- Security and surveillance systems
- Alarm indication
- Energy consumption metering
- Connecting external inputs to SCADA systems

Typical application examples diagram: Shows connections for Electricity meter, Gas meter, Water meter, Motion detector, Water detector, Door contact, Gas detector, Smoke detector, Pulse counter, and Indicator.

Technical specifications:

Ethernet	
Interface	RJ45 (100BASE-T4) - 10/100 Mbps
Supported protocols	Modbus/TCP, HTTP, NTR, SMT, NetGSM, HWg-PUSH, SNMP, XML
SNMP compatibility	ver. 1, partial ver. 2, ver. 3
Digital inputs (DI)	
Port	IL - IL2
Type	12x digital input (supports NO/NC Dry contact)
Pulse counter	12x 32-bit
Digital Outputs (DO)	
Type	4x open collector
Max. load	50V, max. 500 mA / output, max. 1,500 mA all 8 outputs
Logger	
Internal memory	250,000 records
Recorded values	DL, DO
Power	9-30V DC
Supported software	
HWg-Trigger	Alert redirection to SMS, pop-up messages, PC shutdown
HWg-PDMS	Logging of values, graphs, export to MS Excel
More software	Third-party software, HWg-SDK
Dimensions / mass	
Dimensions	145 × 40 × 90 mm
Mass	222 g

Configuration interface: Screenshot of the web-based configuration interface for Damocles2 1208.

Main changes in the 2nd generation:

	1 st generation Damocles2	Damocles2 1208
Extended IP Filter	✗	✓
SNMPv3	✗	✓
HWg-PUSH (SensDesk portal)	✗	✓
NetGSM (HWg-SMS-GW3)	✗	✓
Virtual Output (XML)	✗	✓
Pulse counter (50 pulse)	✗	✓
HTTPS	✗	✓
IPv6	✗	✓
MQTT (IoT portals)	✗	✓
Group Alarm	✓	✗


Versions and related products:

- Damocles2 1208: 12x DI, 8x DO OC, stand-alone device
- Damocles2 1208 set: 12x DI, 8x DO OC, includes a power adapter
- Damocles2 2404 set: 24x DI, 4x DO relay, includes a power adapter
- Damocles2 MINI set: 4x DI, 2x DO relay, includes a power adapter
- HWg-SMS-GW3: GSM gateway for ring and SMS notification
- Back-Up UPS Lite: Backup power supply 12V, 1.3Ah

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Flyer A4 (210 × 297 mm)

Damocles2 2404



Damocles2 2404
Secure industrial I/O with PoE and telco -48V power options

- Digital inputs
- Relay outputs
- Pulse counter
- Web server
- E-mail notifications
- SNMP protocol
- MQTT protocol
- Modbus TCP protocol

Damocles2 2404 provides 24 digital inputs (DI) for dry contact detectors. All digital inputs feature 50 pulse counters with a memory to connect water, gas, electricity or other meters. Damocles2 2404 controls 4 digital relay outputs (DO). A built-in web server is used for configuring. The device can be monitored remotely over the Internet using the SensDesk portal or the SensDesk Mobile app. Thanks to 9-30VDC, -48V and PoE power options, Damocles2 2404 can be deployed in a wide range of scenarios.

Damocles2 devices are designed to monitor and control digital I/O over the network using secure M2M protocols (HTTPS, IPv6, SNMPv3). With support for over 50 SNMP and SCADA applications, Damocles2 devices can be integrated in a wide range of monitoring and control systems. MQTT protocol enables integration in IoT solutions.

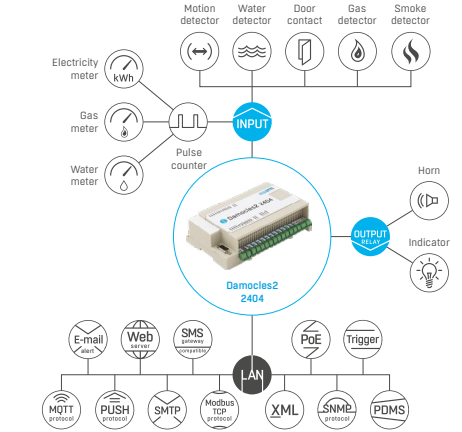
Basic features of Damocles2 devices:

- Web-based configuration
- All inputs feature 32-bit pulse counters that retain their value even if the power fails
- Supports "SMS + Ring" function
- When a DI state changes, the device sends an e-mail, SMS, SNMP Trap, or activates a remote relay at another Damocles2 unit
- With the HWg-PDMS software, 50 pulses can be converted to cost per time period and exported to MS Excel
- MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services
- To send an alarm SMS whenever a DI state changes, use the HWg-Trigger software, or a HWg-SMS-GW gateway in the same LAN
- Examples for programmers on using the HWg-SDK (Borland C++, MS Visual, VB, C#, PHP, JAVA and more)
- Supports up to 8 virtual digital outputs (VDO) that can be mapped to physical digital outputs (relays) of other Damocles2 units on the network

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Typical application examples

- Remote equipment monitoring
- Smart buildings
- UPS monitoring
- Security and surveillance systems
- Alarm indication
- Energy consumption metering
- Connecting external inputs to SCADA systems



Ethernet

Interface	Rj45 (100BASE-Tx) - 10/100 Mbps, supports PoE (Power over Ethernet)
Supported protocols	Modbus/TCP, HTTP, NTR, SMTP, netGSM, HWg-PUSH, SNMP, XML
SNMP compatibility	ver. 1, partial ver. 2, ver. 3

Digital Inputs (DI)

Port	DI - I24
Type	24x digital input (Supports NO/NC Dry contact)
Pulse counter	12x 32-bit

Digital Outputs (DO)

Type	DO1, DO2, DO3, DO4 / relay contacts (NC-COM-NO)
Max. load	Max. 4A / 24V

Logger

Internal memory	250,000 records
Recorded values	DI, DO
Power	9-30VDC, -48V, PoE

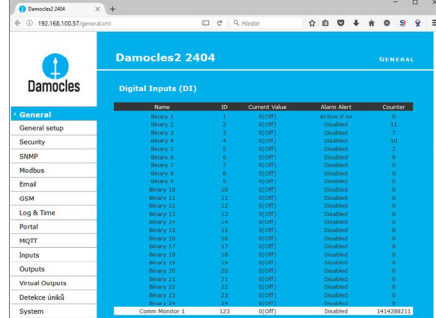
Supported software

- HWg-Trigger: Alert redirection to SMS, pop-up messages, PC shutdown
- HWg-PDMS: Logging of values, graphs, export to MS Excel
- More software: Third-party software, HWg-SDK

Dimensions / mass

Dimensions	179 x 45 x 116 mm
Mass	400 g


Configuration interface



Main changes in the 2nd generation

Feature	1 st generation Damocles	Damocles2 2404
Extended IP Filter	✗	✓
SNMPv3	✗	✓
HWg-PUSH (SensDesk portal)	✗	✓
NetGSM (HWg-SMS-GW3)	✗	✓
Virtual Output (XML)	✗	✓
Pulse counter (50 pulse)	✗	✓
HTTPS	✗	✓
IPv6	✗	✓
MQTT (IoT portals)	✗	✓
Group Alarm	✓	✗

Versions and related products



Damocles2 2404: 24x DI, 4x DO relay, stand-alone device
 Damocles2 2404 set: 24x DI, 4x DO relay, includes a power adapter
 Damocles2 1208 set: 12x DI, 8x DO DO, includes a power adapter
 Damocles2 MINI set: 4x DI, 2x DO relay, includes a power adapter
 HWg-SMS-GW3: GSM gateway for ring and SMS notification
 Back-Up UPS Lite: Backup power supply, 12 V, Li-Ion

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WLD2



WLD2
Quad water leak detector with WiFi and Ethernet. Support for WWW, SNMP and PoE.

- Water Leak Detection
- E-mail notification
- SMS gateway
- Virtual output
- SNMP trap
- Web server
- Wi-Fi
- SensDesk portal
- Ethernet
- PoE (power over ethernet)

WLD2 is a WiFi / Ethernet water leak detector with support for WWW, SNMP, e-mails and PoE. It uses up to 4 very sensitive sensing cables. Alarms are triggered by even the smallest volumes of liquids, such as condensation from A/C pipes or water leaks in general. You will receive alarms before costly damages occur. In addition to flooding, the device also detects disconnected or damaged sensing cables for increased reliability.

Compared to HWg-WLD, up to 4 independent detecting cables can be connected to the WLD2 to help locate the leak more accurately.

Thanks to WiFi connectivity, the WLD2 water leak detector can be installed in remote places. In case of flooding it can send an alert via e-mail, SNMP trap or the SensDesk cloud. With an external SMS gateway by HW group it can send a text message or dial a phone number.

Flooding can be also indicated by switching a remote output (e.g. a relay) over the network (Box-2-Box mode with a Poseldon2 or Damocles2 unit), independently for each sensing cable.

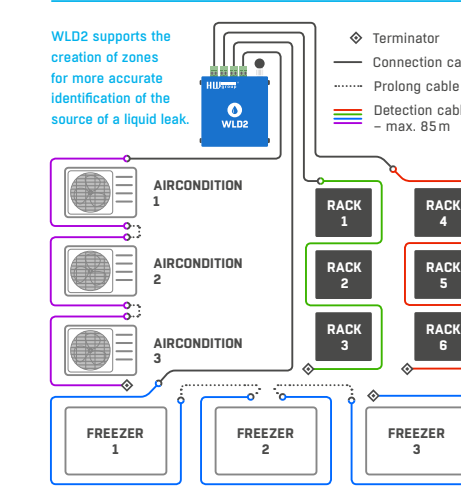
Each detection circuit can consist of up to 85m of sensing cable + up to 100m of connecting cable.

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Typical application examples

- Water detection under raised floors
- Leaky pipe detection (cable wrapped along the pipe)
- Protection against floods from skylights - sensing cable routed along the walls
- Detection of water leaks in drip trays
- Detection of water leaks under air-conditioning outlets

WLD2 supports the creation of zones for more accurate identification of the source of a liquid leak.



Ethernet

Interface	Rj45 (10/100BASE-T)
Supported protocols	IP: ARP, TCP/IP (HTTP, HTTPS, SMTP), UDP/IP (SNMP), Wg-Push, netGSM, TLS, UDP/IP (SNMP)
SNMP	Version 1 fully supported, some parts version 2

WiFi

Supported standards	802.11 b/g/n
Frequency	2.4 GHz
Output	-18.5 dBm output power in 802.11b mode -18 dBm for 802.11n
Security	WEP / WPA / WPA2 PSK / WPA2 TSK / WPS
Antenna	Internal

External sensors

Number/Connectors	WLD1, WLD2, WLD3, WLD4 / terminal blocks
Type	Moisture sensing cable
Connector	Terminal block
Sensor states	0 = OK, 1 = Flooded, 2 = Cable disconnected
Sensing cable length	Max. 85m
Cable extension	May be extended by at most 100m, AWG 24

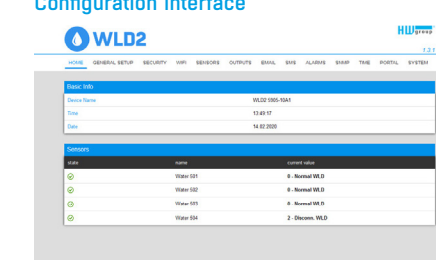
Power supply

Power voltage	5V / 250mA
Connector	jack Ø 3.5 x 1.35 / 10mm
PoE power over ethernet	Rj45 - IEEE 802.3af Class 0

Other parameters

Operating temperature	-10 to 60 °C (range of device operating temperatures - may not correspond to sensor range)
Dimensions/weight	85 x 80 x 30 mm / 500 g
Emission, radiation	CE / FCC Part 15, Class B
Emission, compatibility	EN 55022, EN 55024, EN 61000

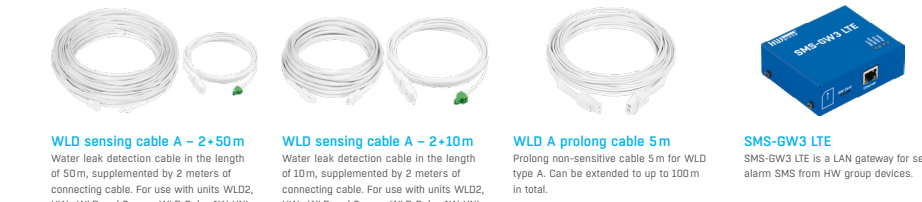
Configuration interface



Comparison of HWg-WLD and WLD2

Feature	HWg-WLD	WLD2
WLD circuits	1	4
Ethernet	✓	✓
WiFi	✗	✓
HTTPS	✗	✓
External antenna	✗	✓
TLS	✗	✓
SensDesk support	✗	✓
PoE	✗	✓
Remote outputs	1	4

Related products



WLD sensing cable A - 2 x 50m: Water leak detection cable in the length of 50m, supplemented by 2 meters of connecting cable. For use with units WLD2, HWg-WLD and Sensor WLD Relay SW-UM.

WLD sensing cable A - 2 x 10m: Water leak detection cable in the length of 10m, supplemented by 2 meters of connecting cable. For use with units WLD2, HWg-WLD and Sensor WLD Relay SW-UM.

WLD A prolong cable 5m: Prolong non-sensitive cable 5m for WLD type A. Can be extended to up to 100m in total.

SMS-GW3 LTE: SMS-GW3 LTE is a LAN gateway for sending alarm SMS from HW group devices.

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Flyer A4 (210 × 297 mm)

HWg-STE



HWg-STE

Web thermometer with Ethernet and software for creating MS Excel reports

- E-mail alerts
- Temperature
- Humidity
- Web server
- Password protection
- SNMP
- Easy installation

HWg-STE monitors temperature and humidity using external probes, supports SNMP and connects to the Internet through an Ethernet network. Get immediately notified via e-mail whenever the monitored values exceed the allowed range.

HWg-STE supports up to three sensors connected over the 1-Wire bus. A built-in web server is used for configuring. The device can be monitored remotely over the internet. It is supplied with the free HWg-PDMS software for creating graphs and exporting data to MS Excel.

Food storage Oversee optimal storage conditions. With application software, HACCP reports can be created.	Service provision monitoring With the supplied HWg-PDMS software, easily create reports with temperature charts for one or more locations. Monitor the quality of outsourced services.	HVAC monitoring Monitor HVAC systems remotely, get alerted by e-mail or text messages.
Heating optimization Save on heating and air-conditioning costs.	Detecting A/C problems Temperature changes may point to a malfunctioning air-conditioning unit.	Supplied with an AC adapter and a temperature sensor.
Easy installation, DHCP support.	Easily create temperature graphs in MS Excel.	

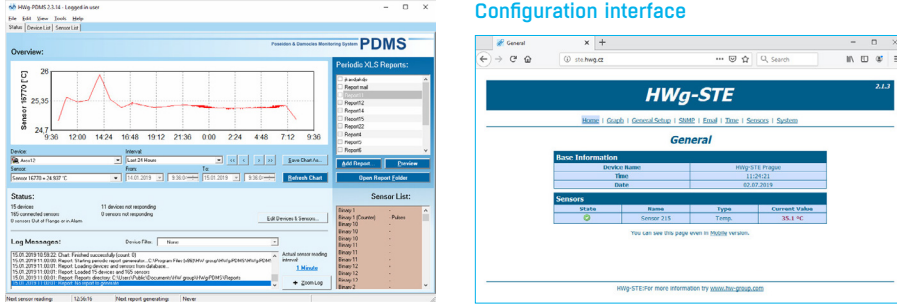
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Basic features

- No SW necessary, built-in web server
- Easy installation, DHCP support
- Connects to NMS (SNMP MIB)
- Resolution: 0.1 °C, supports °C/°K or °F
- DHCP for IP assignment: Yes
- Security ensured with a password
- Temperature range of the standard sensor: -10 °C to 80 °C, outdoor version: -30 °C to 125 °C
- In addition to the supplied sensor, a second temperature or humidity sensor can be connected
- Supplied with the HWg-PDMS software for Windows for plotting charts and exporting data to MS Excel

Parameters	
Ethernet	100 Mbit/s
IP protocols	ARR TCP/IP (HTTP, SMTP), UDP/IP (SNMP)
DHCP for IP assignment:	Yes
SNMP	Port 161, Ver 1.0 / 2.0 (partial)
M2M protocols	XML (http), SNMP
Accuracy	+0.5 °C (-10 °C to +85 °C) +2 °C (-55 °C to +125 °C)
Power	5V / 1W
Operating temperature	-10 °C to 60 °C

Configuration interface




Related products

- Temp-1Wire-Flat 3m
- Temp-1Wire-Rack 19
- UPS 12V and 5V
- HWg-PDMS

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STE2 r2



Standalone Monitoring

STE2 r2

STE2 r2 is a WiFi/LAN SNMP thermometer with RJ11 external sensors and 2x DI inputs.

Temperature sensor included. Sends alert messages in case of an alarm (email, SMS, voice calls).

You can connect:

- Up to 5 sensors values: Temperature (Pt1000), Relative Humidity, Flood detector, Carbon dioxide, Atmospheric pressure, Voltage sensor, Current, Light measurement
- 2x DI (Digital Inputs): Smoke detector, Power presence, Door contact

Portal based services

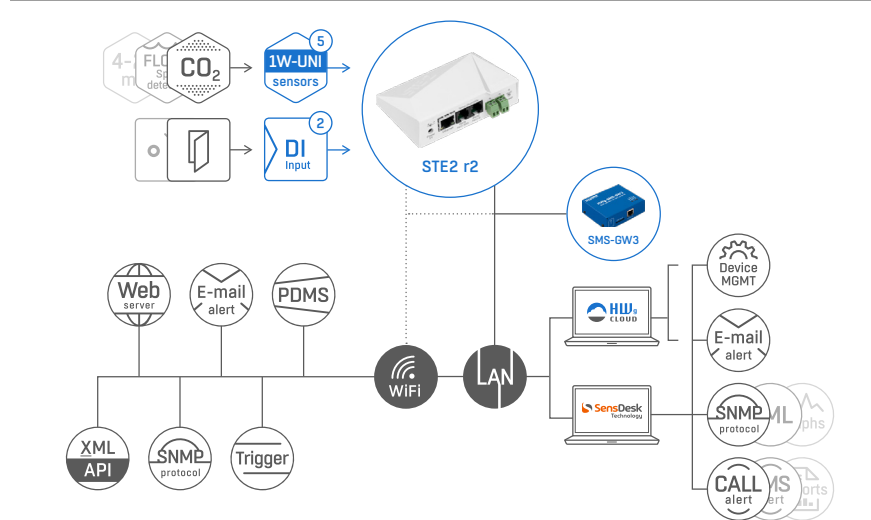
Portal service (SaaS / hosted version) for remote monitoring

- HWg-cloud.com - limited free service
- SensDesk.com - paid service
- Portals from 3rd party portal providers

Typical applications

- Remote air conditioning control
- Remote monitoring of refrigerator or freezer
- Storage conditions monitoring, HACCP logs
- Remote environment monitoring
- Alerting for temperature, humidity, electric current, CO2 limits

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Technical specifications

External power	5V jack Ø3.5x1.35mm, PoE RJ-45
Temperature range	Operating: -10 °C - 60 °C / 0% RH - 95% RH Storage: -30 °C - 60 °C / 0% RH - 95% RH
Dimensions / weight	88x68x33 (WxHxD) / 91g
Connectivity	LAN, Wi-Fi

External Sensors and Detectors

Sensor ports	2x RJ11 (2 ports, 5 sensor values in total)
Compatible sensors	1-Wire/1W-UNI sensors from HW group only
Digital Inputs	2x Dry contact input
You can monitor	Temperature, Relative Humidity, Voltage, AC / DC Current, Flood detector, CO2, VOC, Light intensity & many more...

Communication

M2M Open API	SNMP v1/v2, XML over HTTP, HWg-Push
Alarms	Email, HWg-Push, SMS & Voice calls (with assistance of SMS-GW3 LTE)

Software / Services

SensDesk Technology portal	Online remote monitoring service. Graphs, alerts, device management
HWg-cloud.com	Free of charge portal service
HWg-PDMS (Windows)	Logging, graphs, export to MS Excel
Mobile App	HWg monitor, SensDesk Mobile
Other software	3rd party software, HWg-SDK

Related products

- Flood detector 1W-UNI
- SMS-GW3 LTE
- Temp 1Wire Pt100
- Temp-1Wire-Flat

Standalone Monitoring

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Flyer A4 (210 × 297 mm)

HWg-Ares 10

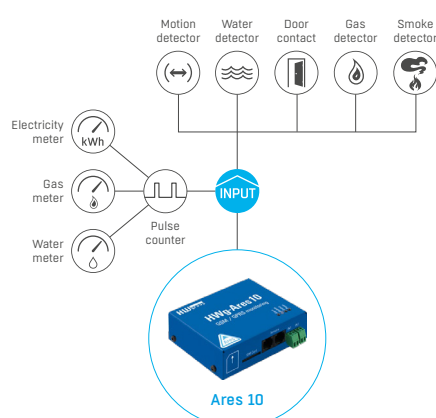


Ares 10

Low-cost GSM thermometer with remote management and alarming via calls, texts or e-mail

Typical application examples


- Electricity distribution networks (transformer stations, lines)
- Water source monitoring, including technical equipment status
- Agricultural premises (greenhouses, granaries, etc.)
- Road, highway, or railroad technology
- Temperature and thermal expansion of structures
- Diesel generators – environment and status monitoring



Differences between Ares 10 vs. Ares 12


	Ares 10	Ares 12
1-Wire UNI sensors	3*	14*
External Relay Outputs compatible	✗	✓
Battery	✗	✓

Configurations and related products



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HWg-Ares 12

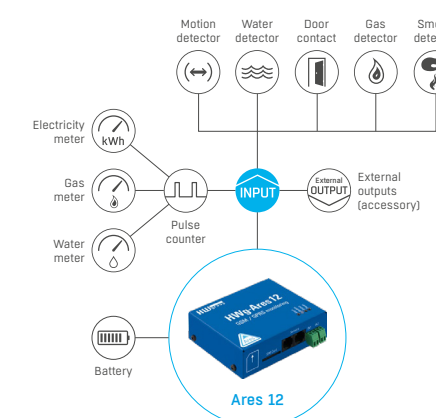


Ares 12

Industrial measuring and monitoring for 14 sensors, communication over GSM and back-up power

Typical application examples


- GPRS monitoring of machines and their environment
- ATMs – environment monitoring without tampering with the connection
- Art exhibits and depositories
- Storages of food or materials
- Cooling systems and coolers



Differences between Ares 12 vs. Ares 10

	Ares 12	Ares 10
1-Wire UNI sensors	14*	3*
External Relay Outputs compatible	✓	✗
Battery	✓	✗

Configurations and related products




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Flyer A4 (210 × 297 mm)

Ares 10 LTE



Ares 10 LTE

LTE remote metering device with free portal for central Device management. SMS, Voice calls & Email Alarming included.

The Ares 10 LTE is cost-effective remote monitoring and alerting device for remote locations without LAN access. Connect up to 6 external sensors and 2 DI for external detectors with relay output. Ares can be configured locally via USB or remotely from the HWg-cloud.com. Ares can be also connected to any SensDesk portal. SensDesk is remote Monitoring and Alerting system which can be installed on the customer's site. Ares continuously analyzes state and values of connected external sensors. When a value reaches the alarm threshold, Ares can be configured as standalone alerting device (sending Email, SMS or dials Voice Call).

You can connect:

- Up to 6 sensors
 - Temperature (Pt1000)
 - Relative Humidity
 - Carbon dioxide
 - Water Leak Detection
 - Atmospheric pressure
 - Current (4-20 mA)
 - Voltage sensor
- 2x DI (Digital Inputs)
 - Power presence
 - Smoke detection
 - Door contact

Up to 6 external sensors
Connect up to 6 external sensor values (RJ11) bus (max. 60 metres). Sensors of current, voltage, temperature, light intensity, CO₂ and VoC are available.

2x DI for external detectors
To DI (Digital Input) you can connect 2 external detectors (DI/1) with relay output. Detectors of smoke, air-flow, flood, power presence are available.

Remote configuration
The device can be configured remotely at the "AresConf" tab in the HWg-cloud or SensDesk portal.


Standalone / IoT Monitoring
Device can be used as standalone alerting unit with remote web configuration over HWg-cloud.com service. Or it can be IoT monitoring device, connected to the portal, where all alarming/reporting is realized from the portal.

5x E-mail / 5x SMS+Ring
User can be alerted from the device by email or by calling and texting up to 5 numbers. HWg-cloud or SensDesk can be also used for alerting.

Data graphs on the website
HWg-cloud.com or SensDesk service can receive data from the device and show value graphs. Data can be also sent in e-mail attachments or downloaded via USB.

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Ares 12 LTE



Ares 12 LTE

LTE remote metering device with free portal for central Device management. SMS, Voice calls & Email Alarming included.

The Ares 12 LTE is cost-effective remote monitoring and alerting device for remote locations without LAN access. Connect up to 14 external sensors and 2 DI for external detectors with relay output. Ares can be configured locally via USB or remotely from the HWg-cloud.com. Ares can be also connected to any SensDesk portal. SensDesk is remote Monitoring and Alerting system which can be installed on the customer's site. Ares continuously analyzes state and values of connected external sensors. When a value reaches the alarm threshold, Ares can be configured as standalone alerting device (sending Email, SMS or dials Voice Call).

You can connect:

- Up to 14 sensors
 - Temperature (Pt1000)
 - Relative Humidity
 - Carbon dioxide
 - Water Leak Detection
 - Atmospheric pressure
 - Current (4-20 mA)
 - Voltage sensor
- 2x DI (Digital Inputs)
 - Power presence
 - Smoke detection
 - Door contact

Up to 14 external sensors
Connect up to 14 external sensor values (RJ11) bus (max. 60 metres). Sensors of current, voltage, temperature, light intensity, CO₂ and VoC are available.

2x DI for external detectors
To DI (Digital Input) you can connect 2 external detectors (DI/1) with relay output. Detectors of smoke, air-flow, flood, power presence are available.

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Data graphs on the website
HWg-cloud.com or SensDesk service can receive data from the device and show value graphs. Data can be also sent in e-mail attachments or downloaded via USB.

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Typical application examples

- Electricity distribution networks (transformer stations, lines)
- Water source monitoring, including technical equipment status
- Agricultural premises (greenhouses, granaries, etc.)
- Road, highway, or railroad technology
- Temperature and thermal expansion of structures
- Diesel generators – environment and status monitoring

LTE Connections

FDD LTE bands: B1/B3/B5/B7/B8/B20
WCDMA bands: B1/B5/B8
GSM bands: 800/1800 GPRS multi-slot class 12
Class 4 (23.5dBm +2dB) for GSM900
Class 1 (30.9dBm +2dB) for GCS1800
Class E2 (27.0dBm +3dB) for GSM900 8-PSK
Class E2 (26.0dBm +3dB) for GCS1800 8-PSK
Class 3 (24.4dBm +/-3dB) for WCDMA bands
Class 3 (23.5dBm +2dB) for LTE FDD bands

Supported protocols: IP: TCP, UDP, HTTP, SMTP, MQTT, HTTPS
LTE limits: Voice call alerts from device require GSM 2G or 3G network coverage.

Sensors

Type: HWg original accessories: RJ11 sensors
Connector: 2x RJ11 port (3-Wire LAN)
Sensors: Up to 8 sensor values
Sensor distance: Up to 60m

Dry contact inputs

Port: IL, IL2
Type: Digital input (Dry contact) • Pulse counter (32 bit)
Sensitivity: 1 (DI) = 0-500 Ω (Right pin on the terminal block can be connected to 12V GND)
Max. distance: Up to 50m

Power input

Port: 9-30V DC
Type: Main device power input (typically 500mA)
Connector: Jack (barrel, inner 2.1mm outer 5.5mm) • Terminal Block

Physical parameters

Temperature range: Operating: 5 to +50°C (+4 to +122°F)
Storage: -25 to +85°C (-13 to +185°F)
Dimensions / Weight: 78×93×31 mm / 150g
EMC: FCC Part 15, Class B, CE - EN 55022, EN 55024, EN 61020

Differences between Ares 10 LTE vs. Ares 12 LTE

	Ares 10 LTE	Ares 12 LTE
Sensor values	6x	14x
External Relay Outputs compatible	✗	✓
Internal rechargeable battery	✗	✓

Versions and related products

- Ares 10 LTE plain: Main unit is just Ares 10 LTE device without accessories.
- Ares 10 LTE set: Ares 10 LTE starting package with temperature sensor, power adapter, external antenna, USB cable.
- HWg-Ares 12 plain: Main unit is just GSM Ares 12 device without accessories.
- Converter 2xPt100 1W-UNI: Double converter for Pt-100 and Pt-1000 probes.
- Back-up UPS 12V: Backup power supply, 12V, 1.3Ah.

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Typical application examples

- Electricity distribution networks (transformer stations, lines)
- Water source monitoring, including technical equipment status
- Agricultural premises (greenhouses, granaries, etc.)
- Road, highway, or railroad technology
- Temperature and thermal expansion of structures
- Diesel generators – environment and status monitoring

LTE Connections

FDD LTE bands: B1/B3/B5/B7/B8/B20
WCDMA bands: B1/B5/B8
GSM bands: 800/1800 GPRS multi-slot class 12
Class 4 (23.5dBm +2dB) for GSM900
Class 1 (30.9dBm +2dB) for GCS1800
Class E2 (27.0dBm +3dB) for GSM900 8-PSK
Class E2 (26.0dBm +3dB) for GCS1800 8-PSK
Class 3 (24.4dBm +/-3dB) for WCDMA bands
Class 3 (23.5dBm +2dB) for LTE FDD bands

Supported protocols: IP: TCP, UDP, HTTP, SMTP, MQTT, HTTPS
LTE limits: Voice call alerts from device require GSM 2G or 3G network coverage.

Sensors

Type: HWg original accessories: RJ11 sensors
Connector: 2x RJ11 port (3-Wire LAN)
Sensors: Up to 14 sensor values
Sensor distance: Up to 60m

Dry contact inputs

Port: IL, IL2
Type: Digital input (Dry contact) • Pulse counter
Sensitivity: 1 (DI) = 0-500 Ω (Right pin on the terminal block can be connected to 12V GND)
Max. distance: Up to 50m

Power input

Port: 9-30V DC
Type: Main device power input (typically 500mA)
Connector: Jack (barrel, inner 2.1mm outer 5.5mm) • Terminal Block

Physical parameters

Temperature range: Operating: 5 to +50°C (+4 to +122°F)
Storage: -25 to +85°C (-13 to +185°F)
Dimensions / Weight: 78×93×31 mm / 150g
EMC: FCC Part 15, Class B, CE - EN 55022, EN 55024, EN 61020

Differences between Ares 12 vs. Ares 10

	Ares 12	Ares 10
Sensor values	14x	6x
External Relay Outputs compatible	✓	✗
Internal rechargeable battery	✓	✗

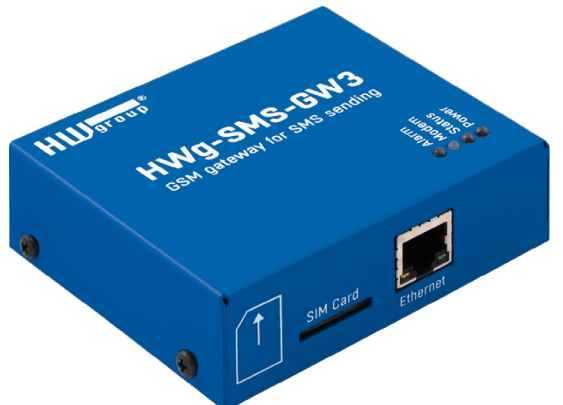
Versions and related products

- Ares 12 LTE plain: Main unit is just Ares 12 LTE device without accessories.
- Ares 12 LTE set: Ares 12 LTE starting package with temperature sensor, power adapter, external antenna, USB cable.
- Ares 10 LTE plain: Main unit is just Ares 10 LTE device without accessories.
- Expander 4xDI 1W-UNI: Expands one 1-Wire line to four digital inputs.
- Converter 2xPt100 1W-UNI: Double converter for Pt100 and Pt1000 probes.

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Flyer A4 (210 × 297 mm)

HWg-SMS-GW3



HWg-SMS-GW3
A gateway for sending SMS messages from HWg devices

Features

- LAN: Make savings on administration costs with minimum effort by using only one SIM card for sending SMS alarms from all your devices. HWg-SMS-GW3 is a LAN gateway for sending alarm SMS from HW group devices. Alarm messages can be sent from any HW group monitoring unit. No additional software needed, works over LAN on the Box-2-Box (Peer-to-Peer) level. Each device can send its alarm messages to different phone numbers. HWg-SMS-GW3 can be used for sending text messages also from HWg software applications (HWg-Trigger, HWg-DCD) and SensDesk.com online portal. A plug-in is available for sending SMS from the Nagios system.
- Web server: HWg-SMS-GW3 is a LAN gateway for sending alarm SMS from HW group devices. Alarm messages can be sent from any HW group monitoring unit. No additional software needed, works over LAN on the Box-2-Box (Peer-to-Peer) level. Each device can send its alarm messages to different phone numbers. HWg-SMS-GW3 can be used for sending text messages also from HWg software applications (HWg-Trigger, HWg-DCD) and SensDesk.com online portal. A plug-in is available for sending SMS from the Nagios system.
- GSM/GPRS: Only one SIM card is needed for sending SMS messages from all HW group products. An SMS gateway for your online SensDesk.com portal account. HWg-DCD2 sends a text message upon unauthorised access to your rack.
- SNMP: HWg-Trigger can notify you by an SMS of a connection issue of any device in your network. Can be used as a gateway also for HWg-Trigger, HWg-DCD2, Nagios and other applications. Sends messages from any connected device, even with no Internet connection.
- SensDesk portal compatible: Send SMS from your SensDesk.com account. No text messaging software needed. Nagios can send its alert messages via SMS.
- Third party compatible: Industry 4.0 ready.

Features

- No software needed for sending SMS alarms. Works in the Box-2-Box mode as a Peer-to-Peer.
- Compatible devices: HWg-PWR 3/12/25, HWg-WLD, Poseidon2 and Damocles2, IP WatchDog2.
- Compatible software: HWg-DCD2, HWg-Trigger, Nagios.
- Compatible online services: SensDesk.com.
- Web-based setup and configuration.
- SMS recipients (phone numbers) are set in the devices (software). A single HWg-SMS-GW3 unit can then send messages to tens of different recipients.
- An external antenna can resolve problems in locations with insufficient signal strength.
- A Quad-Band GSM modem allows you to use the gateway in any GSM network around the world.
- Examples of product usage for programmers are available in the HWg-SDK (Borland C++ Builder, MS Visual C, VB, Delphi, C#, PHP, JAVA).

Connection	
Ethernet	100 Mbit/s
IP protocols	ARP, TCP/IP (HTTP, netGSM)
GSM	Quad-Band 850/900/1800/1900 MHz
Antenna	External, SMA Quad-Band, 3m

Message queue	
SMS queue memory	100 messages

Parameters	
Power	9-15 V / 0,4 A
Dimensions	92×76×31 mm
Environment	From -10°C to +65°C (from +14°F to +149°F)
Supported SW	HWg-PDMS, HWg-Trigger

Versions and related products

- HWg-SMS-GW3: A standard set, contains a SIM card, an external antenna with 3m cable and a power adapter.
- Poseidon2 3468: Remote monitoring and control for industrial applications with 230V/28A relay outputs.
- STE2: WiFi and Ethernet temperature and humidity sensor with digital inputs.
- SensDesk: Monitoring and control portal for your net projects.
- HWg-SH4: System for access control to databases, commercial objects, offices etc.
- Back-Up UPS 12V: Backup power supply 12 V, 1,3 Ah.

SMS-GW3 LTE



SMS-GW3 LTE
A gateway for sending SMS messages from HWg devices

Features

- LAN: Make savings on administration costs with minimum effort by using only one SIM card for sending SMS alarms from all your devices. SMS-GW3 LTE is a LAN gateway for sending alarm SMS from HW group devices. Alarm messages can be sent from any HW group monitoring unit. No additional software needed, works over LAN on the Box-2-Box (Peer-to-Peer) level. Each device can send its alarm messages to different phone numbers. SMS-GW3 LTE can be used for sending text messages also from HWg software applications (HWg-Trigger, HWg-DCD) and SensDesk.com online portal. A plug-in is available for sending SMS from the Nagios system.
- Web server: SMS-GW3 LTE is a LAN gateway for sending alarm SMS from HW group devices. Alarm messages can be sent from any HW group monitoring unit. No additional software needed, works over LAN on the Box-2-Box (Peer-to-Peer) level. Each device can send its alarm messages to different phone numbers. SMS-GW3 LTE can be used for sending text messages also from HWg software applications (HWg-Trigger, HWg-DCD) and SensDesk.com online portal. A plug-in is available for sending SMS from the Nagios system.
- LTE: Only one SIM card is needed for sending SMS messages from all HW group products. An SMS gateway for your online SensDesk portal account. Can be used with HWg-DCD2, which sends a text message upon unauthorised access to your rack.
- GSM/GPRS: Can be used as a gateway also for HWg-Trigger, HWg-DCD2, Nagios and other applications. Can be used with HWg-Trigger, which can notify you by an SMS of a connection issue of any device in your network. Sends messages from any connected device, even with no internet connection.
- SNMP: Only one SIM card is needed for sending SMS messages from all HW group products. An SMS gateway for your online SensDesk portal account. Can be used with HWg-Trigger, which can notify you by an SMS of a connection issue of any device in your network. Sends messages from any connected device, even with no internet connection.
- SensDesk portal compatible: Only one SIM card is needed for sending SMS messages from all HW group products. An SMS gateway for your online SensDesk portal account. Can be used with HWg-Trigger, which can notify you by an SMS of a connection issue of any device in your network. Sends messages from any connected device, even with no internet connection.
- Third party compatible: Only one SIM card is needed for sending SMS messages from all HW group products. An SMS gateway for your online SensDesk portal account. Can be used with HWg-Trigger, which can notify you by an SMS of a connection issue of any device in your network. Sends messages from any connected device, even with no internet connection.
- Industry 4.0 ready.

Features

- No software needed for sending SMS alarms. Works in the Box-2-Box mode as a Peer-to-Peer.
- Compatible devices: HWg-PWR 3/12/25, HWg-WLD, Poseidon2 and Damocles2, IP WatchDog2.
- Compatible software: HWg-DCD2, HWg-Trigger, Nagios.
- Compatible online services: SensDesk.com.
- Web-based setup and configuration.
- SMS recipients (phone numbers) are set in the devices (software). A single SMS-GW3 LTE unit can then send messages to tens of different recipients.
- An external antenna can resolve problems in locations with insufficient signal strength.
- Examples of product usage for programmers are available in the HWg-SDK (Borland C++ Builder, MS Visual C, VB, Delphi, C#, PHP, JAVA).

Connection	
Ethernet	100 Mbit/s
IP protocols	ARP, TCP/IP (HTTP, netGSM)
Interface*	FDD LTE band: B1/B3/B5/B7/B8/B20 WCDMA band: B1/B5/B8 GSM band: 850/900 GPRS multi-slot class 12 Class 4 (33dBm +2dB) for GSM800 Class 1 (30dBm +2dB) for DCSS1800 Class E2 (27dBm +3dB) for GSM900 G-PSK Class E2 (28dBm +3dB) for WCDMA bands Class 3 (24dBm +3dB) for LTE FDD bands Class 3 (22dBm +2dB) for LTE FDD bands
Antenna	External, SMA Quad-Band, 3m

*Choose the model that matches your location. Consult your distributor about the appropriate model.

Message queue	
SMS queue memory	100 messages

Parameters	
Power	9-15 V / 0,4 A
Dimensions	92×76×31 mm
Environment	From -10°C to +65°C (from +14°F to +149°F)
Supported SW	HWg-PDMS, HWg-Trigger

Versions and related products

- SMS-GW3 LTE: A standard set, contains a SIM card, an external antenna with 3m cable and a power adapter.
- Poseidon2 3468: Remote monitoring and control for industrial applications with 230V/28A relay outputs.
- STE2: WiFi and Ethernet temperature and humidity sensor with digital inputs.
- SensDesk: Monitoring and control portal for your net projects.
- HWg-SH4: System for access control to databases, commercial objects, offices etc.
- Back-Up UPS 12V: Backup power supply 12 V, 1,3 Ah.

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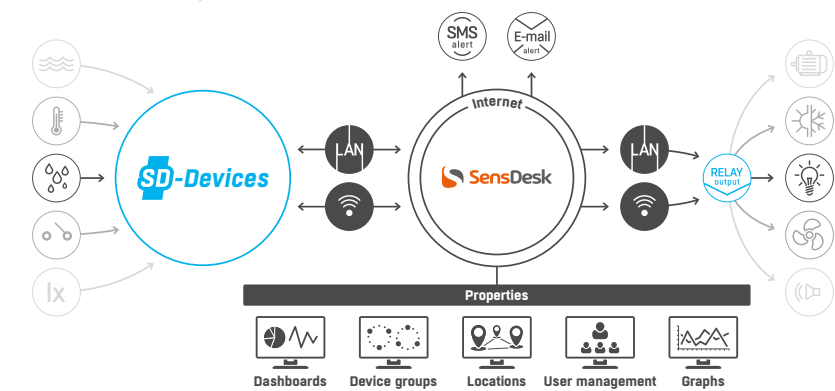
Flyer A4 (210 × 297 mm)

SD devices



SD devices

The SD family are 4 simple devices for the monitoring of temperature, humidity, voltage, current and other parameters. They also detect water leaks, smoke, movement or open doors. The devices connect via Ethernet or WiFi to the SensDesk.com portal.



www.hw-group.com www.SensDesk.com

SD-2x1Wire
Connect up to four sensors of temperature, humidity, voltage, current, light, air flow and many others. The sensors can be 1-Wire or 1-Wire UNI.

SD-WLD
Water leak detection using a sensitive cable. The cable detects even a few drops of water, so it can be also used to detect condensation. Cable can be up to 85 meters long.

SD-2xin
Two digital inputs for door contacts, or any other detector with a dry contact output such as motion, fire, smoke or gas detectors.

SD-2xOut
Two relay outputs easily controlled from the SensDesk portal. You can switch them either manually or with a condition (local or remote).

- SD Devices Features**
- Ethernet and WiFi – 802.11 b/g/n (2.4GHz)
 - Powered by 5V DC or PoE
 - Simple installation, DHCP support
 - Simultaneous Ethernet and WiFi operation
 - Embedded WEB server
 - Security protected with a password
 - Easy setup with a few clicks
 - Metal housing, DIN and rack mount available



- Why use SensDesk.com?**
- Remote monitoring**
Temperature, humidity, power consumption, intrusion, water detection and many more...
 - Event alerts**
Get alerts over SMS or e-mail and be sure you can respond to the event in time.
 - Reports and graphs**
Generate automatic reports and access data history with just a click.
 - Remote output control**
Use conditions to automatically respond to alarms or control outputs manually.
 - User friendly and reliable**
Easy for home users, robust, customizable and scalable for business.
 - SensDesk can connect to third party systems**
You can send your data to other applications using XML, MQTT, SNMP or ModBus TCP.

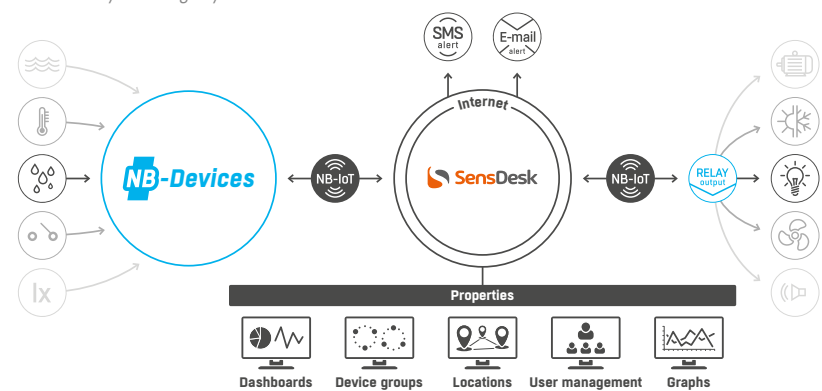
HW group s.r.o. | Fomanská 296 | Prague | Czech Republic | Phone: +420 222 531 918 www.HW-group.com

NB devices



NB IoT devices

The NB family are simple devices for the monitoring of temperature, humidity, water leaks, voltage, current and other values in remote places. The Narrowband IoT devices are battery powered with a battery lifetime up to 3 years. The devices connect to the SensDesk.com portal where you can monitor and control your entire system. Your project is set up in just a few clicks and you can get your data in minutes.



www.hw-group.com www.SensDesk.com

NB-2x1Wire
A simple device for monitoring temperature, humidity and more in remote places. Narrowband IoT connectivity.

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

NB-2xin
An easy to use device with Narrowband IoT connectivity for monitoring digital inputs in remote places.

NB-2xOut
Narrowband IoT device with two relay outputs, that can control remote technology manually or based on conditions.

- NB Devices Features**
- Narrowband IoT (NB-IoT) connectivity
 - Internal battery with up to 3 years lifetime
 - External 5V DC power
 - Simple installation, remote device adoption
 - Hundreds of available sensors
 - Secure and reliable
 - Easy setup with a few clicks
 - Metal housing, DIN and rack mount available



- Why use SensDesk.com?**
- Remote monitoring**
Temperature, humidity, power consumption, intrusion, water detection and many more...
 - Event alerts**
Get alerts over SMS or e-mail and be sure you can respond to the event in time.
 - Reports and graphs**
Generate automatic reports and access data history with just a click.
 - Remote output control**
Use conditions to automatically respond to alarms or control outputs manually.
 - User friendly and reliable**
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 - SensDesk can connect to third party systems**
You can send your data to other applications using XML, MQTT, SNMP or ModBus TCP.

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Flyer A4 (210 × 297 mm)

HWg-SH4



DATA CABINET ACCESS CONTROL

HW group access control solutions, when combined with **Southco intelligent electronic locks** offer audit trail and credential management and enable you to meet today's data protection compliance requirements.

In a world increasingly reliant upon networks and data, never before has there been a greater need for measures which safeguard businesses' physical data infrastructure.

Data cabinet security plays a vital role in helping data centre operators to comply with increasing data security requirements and eliminate the risk of accidental or intentional data breach.

HW group and Southco's Cabinet Level Security Solutions respond to this growing need, employing some of the most advanced technologies available to maximise data centre security in the smoothest, most efficient and manageable ways.

Front page

HWgroup access control solution

The SH4 is a Data Cabinet access system that works well with Southco gear motor actuated locks and integrated RFID readers. One door or several hundred racks - the SH4 system provides a cost effective way to manage access to your technology.

Easy to install. Powerful to use.

Just plug the SH4 unit into your Ethernet network, connect Southco locks, RFID readers or Keypad and use your browser to set it up. The SH4 system comes with free software to help you manage everything from one place - users, doors, groups and locations.

In **offline mode** the SH4 can work as a standalone device that holds an internal database of cards and users.

In **online mode** the device is connected with a server running the HWg-DDD software. This server manages all the access rules.

The relevant part of the entire user database is loaded in each SH4 so that you can still access your technology even if your network connectivity fails.

Expanding the SH4 system

You can expand your system with the SH4s and SH4e units. Controlled from an SH4 unit and its RFID keypad, the SH4s and SH4e units are simple access controllers for 1 or 2 locks. You can grow your access system as needed and manage your costs efficiently.

Southco Data Cabinet Security Solutions

These industry proven 'intelligent locking' solutions are designed to seamlessly integrate with the very latest data protection and monitoring systems and enable a more intelligent and efficient approach to rack level security within the data centre environment, offering:

- ✓ Cabinet audit trail capability
- ✓ Remote access control and monitoring
- ✓ Ability to retrofit into any data cabinet
- ✓ Integration into existing security systems

Electronic Locking Swing Handle

- Standard 25 mm × 150 mm door cut out
- Gear motor driven remote unlock and lock
- Visual monitoring with multi-colour LED
- Lock and Key Status Outputs for remote monitoring
- Euro profile lock cylinder for manual over-ride
- Biometric fingerprint option

Electronic Locking Swing Handle with integrated RFID Reader

- Wiegand output
- HID 125kHz Prox
- Milare Classic
- iClass CSN

Electronic Locking Swing Handle with integrated Dual Frequency RFID Reader

- Wiegand output
- HID 125kHz Prox
- EM 125kHz Prox
- Milare Classic, Plus, Desfire 13.56 MHz
- iClass, iClass Seos 13.56 MHz

Proven Security Solutions - Any cabinet, any system

Electronic Locking and Retro-fit Kit Solutions for Indoor and Outdoor cabinets

Motor Actuated Rotary Latch **Motor actuated Slide Bolt** **Indoor and Outdoor Retro-fit Kits**

Inner pages

About HW group

HW-group is designing professional monitoring devices for over 15 years and manufacturing them in the EU. Our products are protecting important data systems and infrastructures all over the world. HW-group has a worldwide network of distributors ready to help you with your project. All our partners are trained to provide you with the best possible local support.

About Southco

Southco's solutions for data cabinets are built from over 70 years of experience in designing and manufacturing engineered access hardware. Southco's Physical Cabinet-Level Security hardware extends existing security systems to any cabinet. Scalable solutions that are easy to integrate, cost-effective and most importantly secure.

PCV DSS **HIPAA** **SOX COMPLIANT** **EUROPEAN UNION** **ISO 9001** **FISMA**

We have helped the following companies with their monitoring or access solutions. We would be thrilled if you were the next.

MTV NETWORKS **RUKS MUSEUM** **Allianz** **PHILIPS** **SIEMENS**

MITSUBISHI MOTORS **QUIKSILVER** **Mercedes-Benz** **SKODA**

verizon **NOVATO** **Rai** **VIG**

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European Customer and Technical Support Centre
Wainwright Road
Worcester, WR4 9FA
United Kingdom
Phone: (44) (0) 1905 346722
Fax: (44) (0) 1905 346723
Web: www.southco.com

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Flyer A4 (210 × 297 mm)

Temp 1Wire Pt1000



Temp 1Wire Pt1000

Industrial precision sensor

-  High industrial accuracy
-  IP 67 protected
-  High temperature resolution of 0.1°C
-  Wide temperature range (-50°C - 200°C)
-  Affordable price
-  Can be calibrated in 8 points
-  Frost version available (-200°C - 160°C)
-  Compatible with Posidon2, HWg-STE/STE2, HWg-Ares, SD and NB devices

If you need the best sensor for industrial applications, the Temp 1Wire Pt1000 is the right choice. The Pt1000 sensor offers high accuracy over a wide temperature range, long life and IP67 protection. The sensor is connected directly to the 1-wire bus without the need of an additional converter.

The sensor is supported by all HW group devices that feature a 1-wire sensor port. Calibration is possible in 8 points using the HW group Calibrator device.

The Temp 1Wire Pt1000 is an ideal temperature sensor for storages, food processing, freezers, medical and laboratory environments, agriculture and many other industrial applications.

The HW group monitoring system can be used for regular audits of measured values as well as for monitoring critical temperatures and alarming.

Technical parameters	
Temperature	-50 °C up to 200 °C (-200 °C - 160 °C Frost version available)
Accuracy	±(0,25 + 0,002 t)
Resolution	0.10
Protection	IP67
Cable length	3 m
Calibration	Yes, in 8 points

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Application examples

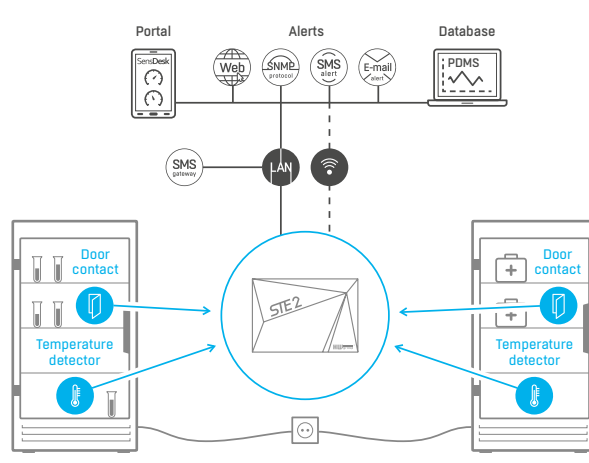
Offering high precision at an affordable price, the Pt1000 sensors are designed for demanding industrial applications, where wide temperature range is critical, data needs to be collected for audits and sensors need to operate in a demanding environment.

Setting up the HW group system takes just a few clicks. Sensors are autodetected and the device's web interface allows easy setup for all kinds of data visualizations. With the free SensDesk.com portal you can have the data visualized in just a few minutes from unpacking the device.

For more advanced applications we offer units with wide range of M2M protocols including SNMP, Modbus, TCR, MQTT, XML, HWg Push and more. HW group devices are also supported by many 3rd party applications and clouds.

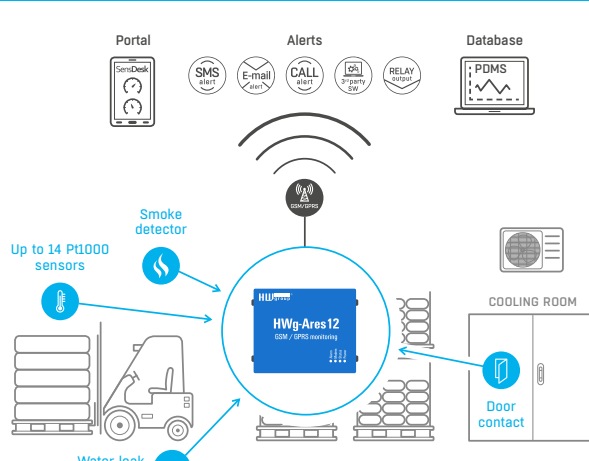
Temperature monitoring in freezers, food storages and medical applications

The STE2 device can monitor precise temperature in 2 independent freezers. 2 door contacts can be connected to see if the fridge door has been opened. The data can be visualized on our free IoT portal SensDesk.com. You can also create periodical reports and review data history. The data can also be retrieved from the device itself without the need for a portal. Email alarms can warn you when values are out of range. SMS alarms or calls are available when you connect the SMS Gateway device.



Temperature monitoring in industrial applications and warehouses

The Ares devices can connect up to 12 Pt1000 sensors and send the data over GSM/GPRS or LTE. The Ares can also monitor many other environmental parameters, making sure your premises stay safe and monitored and you always have a good overview of what's happening. The data can be visualized on our free IoT portal SensDesk.com. You can also create periodical reports and review data history. The data can also be retrieved from the device itself without the need for a portal. Email, SMS and call alarms can warn you when values are out of range.



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SensDesk





SensDesk

Monitoring portal for your IoT projects

SensDesk.com is a web-based service for online remote monitoring and control of HW group sensors and devices. You can monitor temperature, humidity, water leaks, digital inputs, voltage, current, energy consumption and many more. You can also remotely control your technology using outputs. SensDesk is easy to setup, just connect your HW group device to the network, create an account and start monitoring! SensDesk is for end users as well as project installations with hundreds of devices. It can even also be installed on your own servers.

The setup is quick and easy and our sensors can provide data over Ethernet, WiFi, GPRS, LTE or Narrowband IoT.

WHY USE SENSDESK.COM?

-  **Remote monitoring**
Temperature, humidity, power consumption, intrusion, water detection and many more...
-  **Event alerts**
Get alarms over SMS or e-mail and be sure you can respond to the event in time.
-  **Reports and graphs**
Generate automatic reports and access data history with just a click.
-  **Remote output control**
Use conditions to automatically respond to alarms or control outputs manually.
-  **User friendly and reliable**
Easy for home users, robust, customizable and scalable for business.

SOLUTIONS FOR YOUR BUSINESS

-  Data centers & server rooms
-  Warehouses & storage rooms
-  Smart cities & municipal
-  Hotels & house rentals
-  BTS stations & technology
-  Industry & manufacturing
-  Schools & public buildings
-  Logistics & transportation
-  Pharmacy & medical
-  Stores & retail

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Alert services

You can set a safe range of values for any sens in the SensDesk. If this range is exceeded, the system shows an alert for the affected sensor. You can also set more safer ranges if you wish. Alerts can be forwarded to e-mail or SMS. All alerts, such as temporary device or sensor inaccessibility or values out of range, are recorded in the event log for easy system diagnostics.



Remote process control and switching

SensDesk can monitor and control virtual outputs of connected devices. User can switch any output manually. In addition, SensDesk provides several simple algorithms for switching the outputs automatically according to sensor states.

Quick setup and configuration

All HW group IoT devices have a built-in auto detection for the SensDesk portal. Connection of a new device to SensDesk takes less than 60 seconds! All sensors and devices can have custom names and arranged into groups and locations to provide a clear overview according to user preferences.

User dashboard, groups and locations

SensDesk provides tools for customizing the user interface. Users can define names of their sensors, devices and locations. You can also use group related monitoring and control. If you have 1 sensor or 1000, SensDesk always makes it easy for you to see alerts at a glance. All data are presented in charts, with visible operating/safe range limits. Recorded data can be downloaded from the portal in many formats, including XLS, CSV, PDF, JPG, SVG and more.

SensDesk is free

Free users can monitor any number of sensors, connected to up to 3 HW group devices. If you need to connect more devices, paid accounts are available. You can also buy your own dedicated SensDesk and run it as a virtual image on your own server.



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Flyer A4 (210 × 297 mm)

NB-2x1Wire



IoT Monitoring

NB-2x1Wire

NB-IoT remote metering device with external sensors and internal battery. Portal required.

IoT Monitoring device, cloud enabled by default, no expert on the site needed.

SensDesk Technology

NB-2x1Wire is remote metering IoT device with included sim card, connected to NB-IoT (Narrow Band) wireless network provided by your mobile operator.

You can connect and power from internal battery up to 4 external "1-Wire UNI" sensors (Temperature, Humidity, 4-20 mA, WLD Water Leak Detection, Light Sensor, Voltage, ...).

IoT device have to be connected to the SensDesk technology based portal. The HWg-cloud.com portal is free service, there are also listed other compatible portals.

Portal centralizes device management, remote FW upgrades, graphs, alerts by email, SMS or calls. PDF reports are also available.

Portal based services

SensDesk Technology

- HWg-cloud.com for free
- SensDesk.com as paid service
- Several Portal providers available

SIM card included

Subscribed version of this device is delivered with NB-IoT SIM card included. It provides 3 years of connectivity (Vodafone NB-IoT)

Internal battery

Can power device 6 temperature sensor up to 3 years of metering with communication once per 10 hours.

4 sensor values

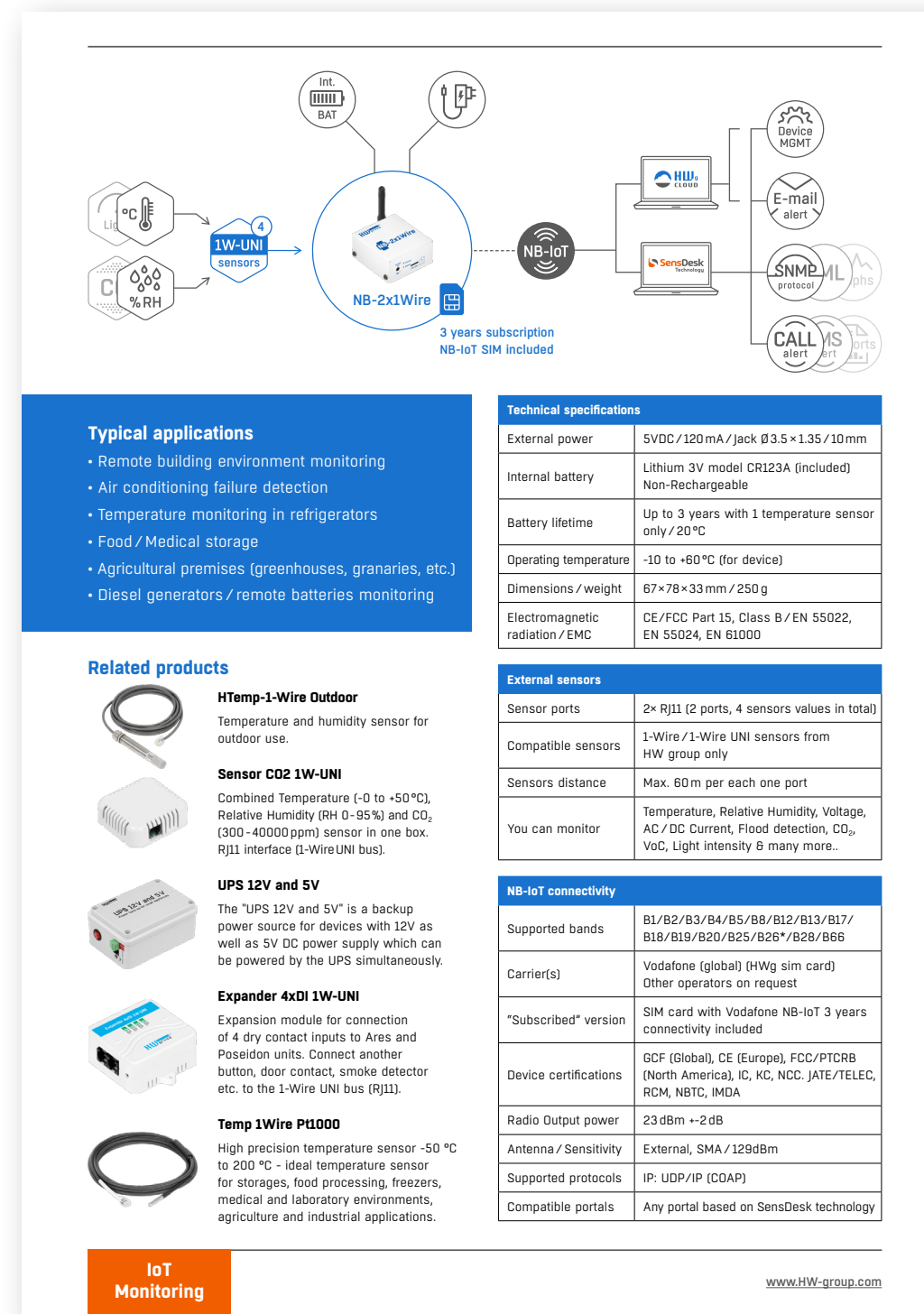
Connect external sensors. Some of them can require external power. One sensor probe can display several sensor values.

You can connect:

Up to 4 sensors values

- Temperature (Pt1000)
- Relative Humidity
- Carbon dioxide
- Water Leak Detection
- Atmospheric pressure
- Voltage sensor
- Current (4-20 mA)

Front page



Typical applications

- Remote building environment monitoring
- Air conditioning failure detection
- Temperature monitoring in refrigerators
- Food / Medical storage
- Agricultural premises (greenhouses, granaries, etc.)
- Diesel generators / remote batteries monitoring

Technical specifications

External power	5VDC / 120 mA / Jack Ø3.5 × 1.35 / 10 mm
Internal battery	Lithium 3V model CR123A (included) Non-Rechargeable
Battery lifetime	Up to 3 years with 1 temperature sensor only / 20 °C
Operating temperature	-10 to +60 °C (for device)
Dimensions / weight	67 × 78 × 33 mm / 250 g
Electromagnetic radiation / EMC	CE / FCC Part 15, Class B / EN 55022, EN 55024, EN 61000

External sensors

Sensor ports	2 × RJ11 (2 ports, 4 sensors values in total)
Compatible sensors	1-Wire / 1-Wire UNI sensors from HW group only
Sensors distance	Max. 60m per each one port
You can monitor	Temperature, Relative Humidity, Voltage, AC / DC Current, Flood detection, CO ₂ , Volc, Light intensity & many more...

NB-IoT connectivity

Supported bands	B1/B2/B3/B4/B5/B8/B12/B13/B17/B18/B19/B20/B25/B26*/B28/B66
Carrier(s)	Vodafone (global) (HWg sim card) Other operators on request
*Subscribed version	SIM card with Vodafone NB-IoT 3 years connectivity included
Device certifications	GCF (Global), CE (Europe), FCC/PTCRB (North America), IC, KC, NCC, JATE/TELEC, RCM, NBTC, IMDA
Radio Output power	23 dBm ± 2 dB
Antenna / Sensitivity	External, SMA / 129 dBm
Supported protocols	IP: UDP/IP (CoAP)
Compatible portals	Any portal based on SensDesk technology

Related products

- Temp-1-Wire Outdoor**
Temperature and humidity sensor for outdoor use.
- Sensor CO2 1W-UNI**
Combined Temperature (-10 to +50 °C), Relative Humidity (RH 0-95%) and CO₂ (300-40000 ppm) sensor in one box. RJ11 interface (1-Wire UNI bus).
- UPS 12V and 5V**
The "UPS 12V and 5V" is a backup power source for devices with 12V as well as 5V DC power supply which can be powered by the UPS simultaneously.
- Expander 4xDI 1W-UNI**
Expansion module for connection of 4 dry contact inputs to Ares and Poseidon units. Connect another button, door contact, smoke detector etc. to the 1-Wire UNI bus (RJ11).
- Temp 1Wire Pt1000**
High precision temperature sensor -50 °C to 200 °C - Ideal temperature sensor for storages, food processing, freezers, medical and laboratory environments, agriculture and industrial applications.

IoT Monitoring

www.hw-group.com

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Download all flyers from our website

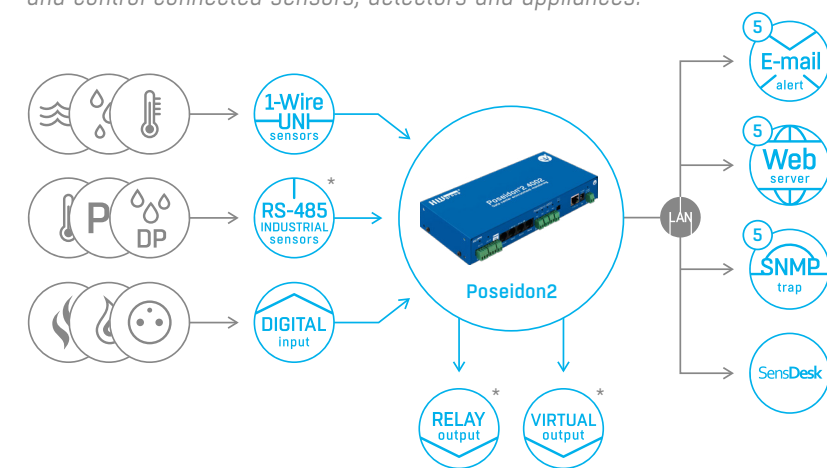
Poster A1 (594 × 841 mm)

Poseidon2



Poseidon2

The Poseidon2 devices connect mainly sensors and a small number of I/O (Inputs/Outputs) to the Ethernet so the user can monitor and control connected sensors, detectors and appliances.



www.hw-group.com

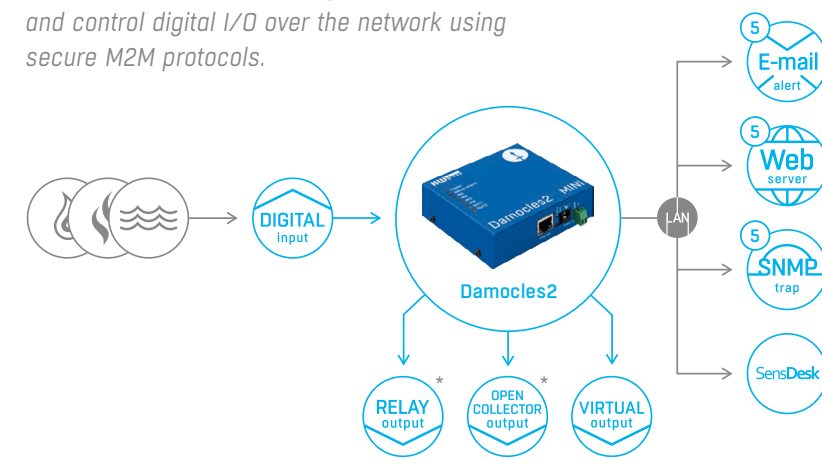
* Depending on the particular model of the Poseidon2 series.

Damocles2



Damocles2

Damocles2 devices are designed to monitor and control digital I/O over the network using secure M2M protocols.



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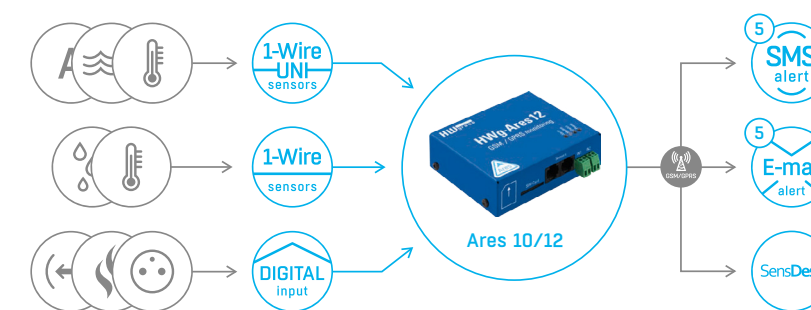
* Depending on the particular model of the Damocles2 series.

HWg-Ares 10/12



Ares 10/12

Ares monitors the readings of connected sensors. When a value reaches the alarm threshold, the device sends an e-mail or SMS or dials up to 5 pre-defined numbers.



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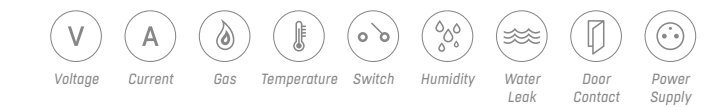
HW group IoT platform



HW group IoT platform

Sensors, applications and cloud solutions for environment and industrial system condition monitoring

Sensors for IoT portal Sensdesk



Wire & Wireless public and private networks



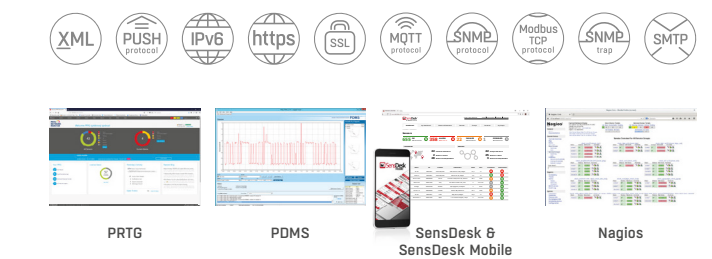
Web User Interface



Cloud Solution



Standard & Secure IT protocols



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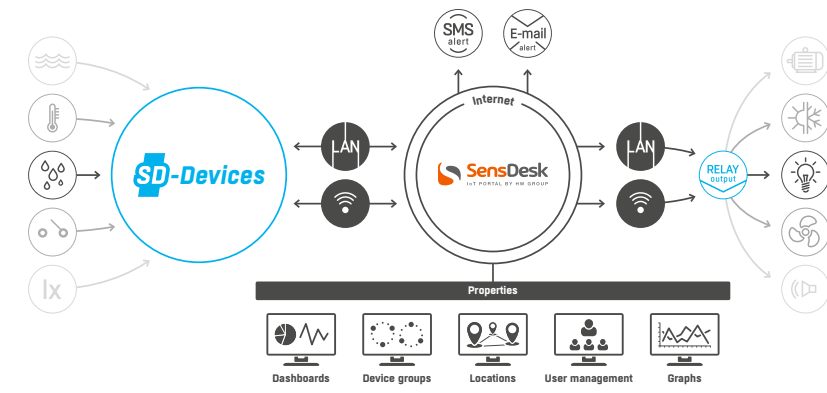
Poster A1 (594 × 841 mm)

SD devices



SD devices

The SD family are 4 simple devices for the monitoring of temperature, humidity, voltage, current and other parameters. They also detect water leaks, smoke, movement or open doors. The devices connect via Ethernet or WiFi to the SensDesk.com portal.



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www.SensDesk.com

SensDesk

SensDesk

Monitoring portal for your IoT projects

SensDesk.com is a web-based service for online remote monitoring and control of HW group sensors and devices. You can monitor temperature, humidity, water leaks, digital inputs, voltage, current, energy consumption and many more. You can also remotely control your technology using outputs. SensDesk is easy to setup, just connect your HW group device to the network, create an account and start monitoring!

SensDesk is for end users as well as project installations with hundreds of devices. It can even also be installed on your own servers.

The setup is quick and easy and our sensors can provide data over Ethernet, WiFi, GPRS, LTE or Narrowband IoT.

WHY USE SENSDESK.COM?

- Remote monitoring**
Temperature, humidity, power consumption, intrusion, water detection and many more...
- Event alerts**
Get alarms over SMS or e-mail and be sure you can respond to the event in time.
- Reports and graphs**
Generate automatic reports and access data history with just a click.
- Remote output control**
Use conditions to automatically respond to alarms or control outputs manually.
- User friendly and reliable**
Easy for home users, robust, customizable and scalable for business.

SOLUTIONS FOR YOUR BUSINESS

- Data centers & server rooms
- Warehouses & storage rooms
- Smart cities & municipal
- Hotels & house rentals
- BTS stations & technology
- Industry & manufacturing
- Schools & public buildings
- Logistics & transportation
- Pharmacy & medical
- Stores & retail

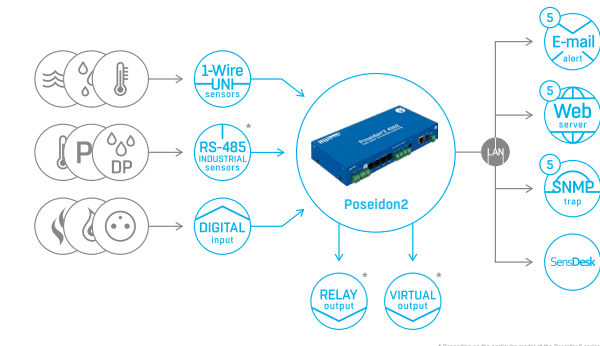
Roll-up (850 × 2000 mm)

Poseidon2



Poseidon2

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HW group s.r.o. is a Czech technological company focused on development, production and distribution of solutions for remote monitoring, alerting and control via LAN, WiFi and GSM, which match the latest demands of industrial use. The company is active since 2003 and supplies its products to more than 40 countries worldwide.



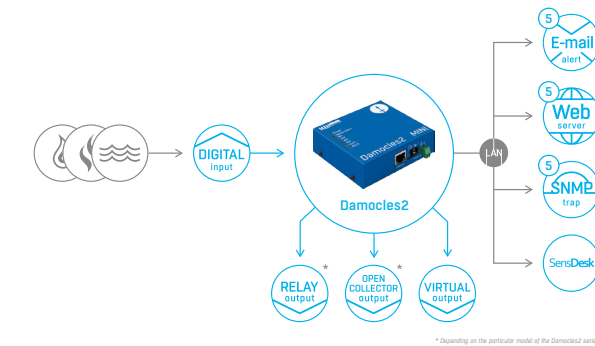
www.hw-group.com

Damocles2



Damocles2

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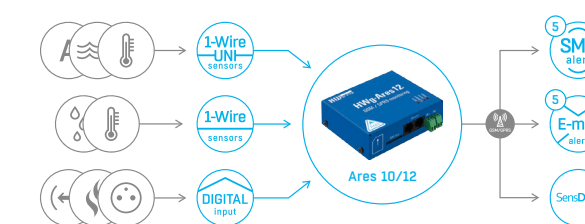
www.hw-group.com

HWg-Ares10/12

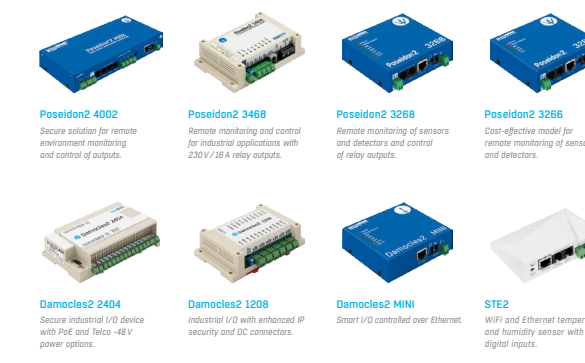


Ares 10/12

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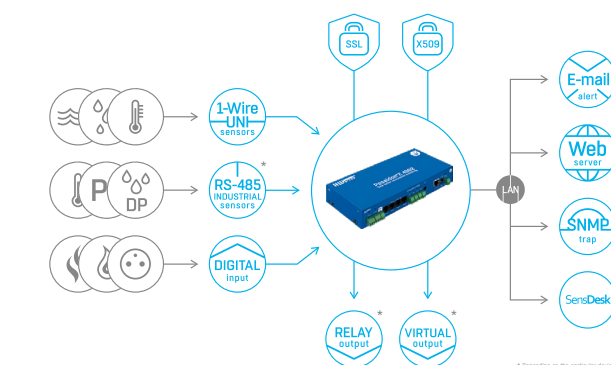
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IoT – made easy



IoT - Internet of Things made easy

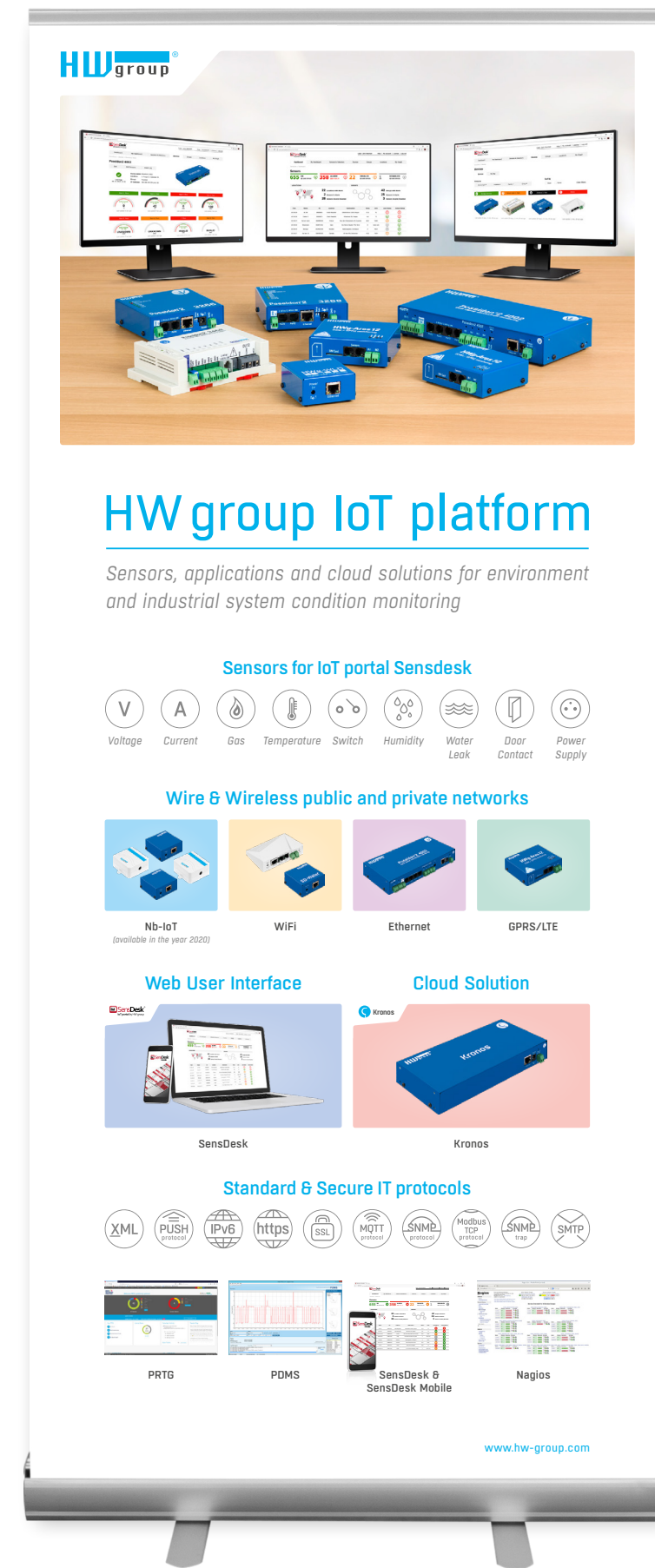
HW group is an IoT manufacturer since 2003. Products are designed for monitoring and control of digital inputs / outputs and sensors.



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Roll-up (850 × 2000 mm)

IoT platform



HW group IoT platform
Sensors, applications and cloud solutions for environment and industrial system condition monitoring

Sensors for IoT portal SensDesk

- Voltage
- Current
- Gas
- Temperature
- Switch
- Humidity
- Water Leak
- Door Contact
- Power Supply

Wire & Wireless public and private networks

- Nb-IoT (available in the year 2020)
- WiFi
- Ethernet
- GPRS/LTE

Web User Interface **Cloud Solution**

- SensDesk
- Kronos

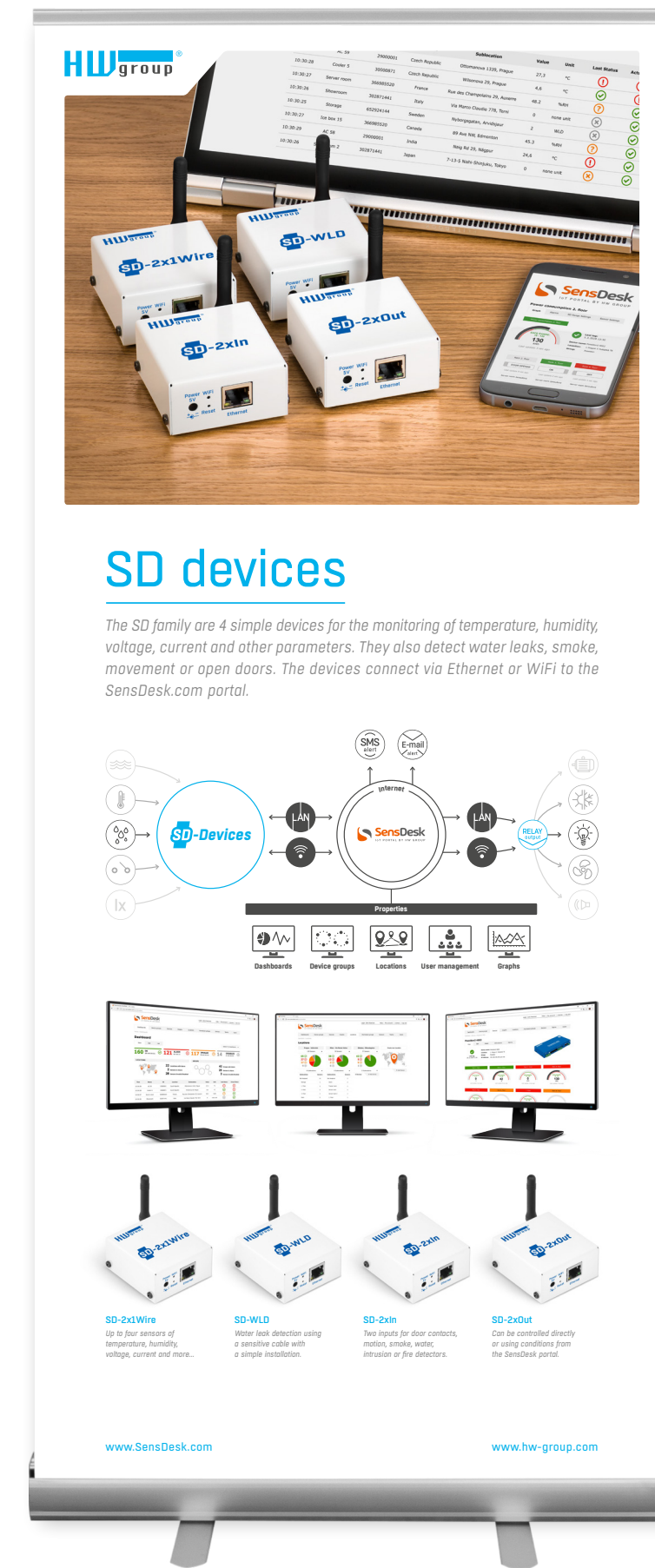
Standard & Secure IT protocols

- XML
- PUSH
- IPV6
- HTTPS
- SSL
- MQTT
- SNMP
- Modbus
- OPC UA
- SNMPv3
- SSH

PRTG PDMS SensDesk & SensDesk Mobile Nagios

www.hw-group.com

SD devices



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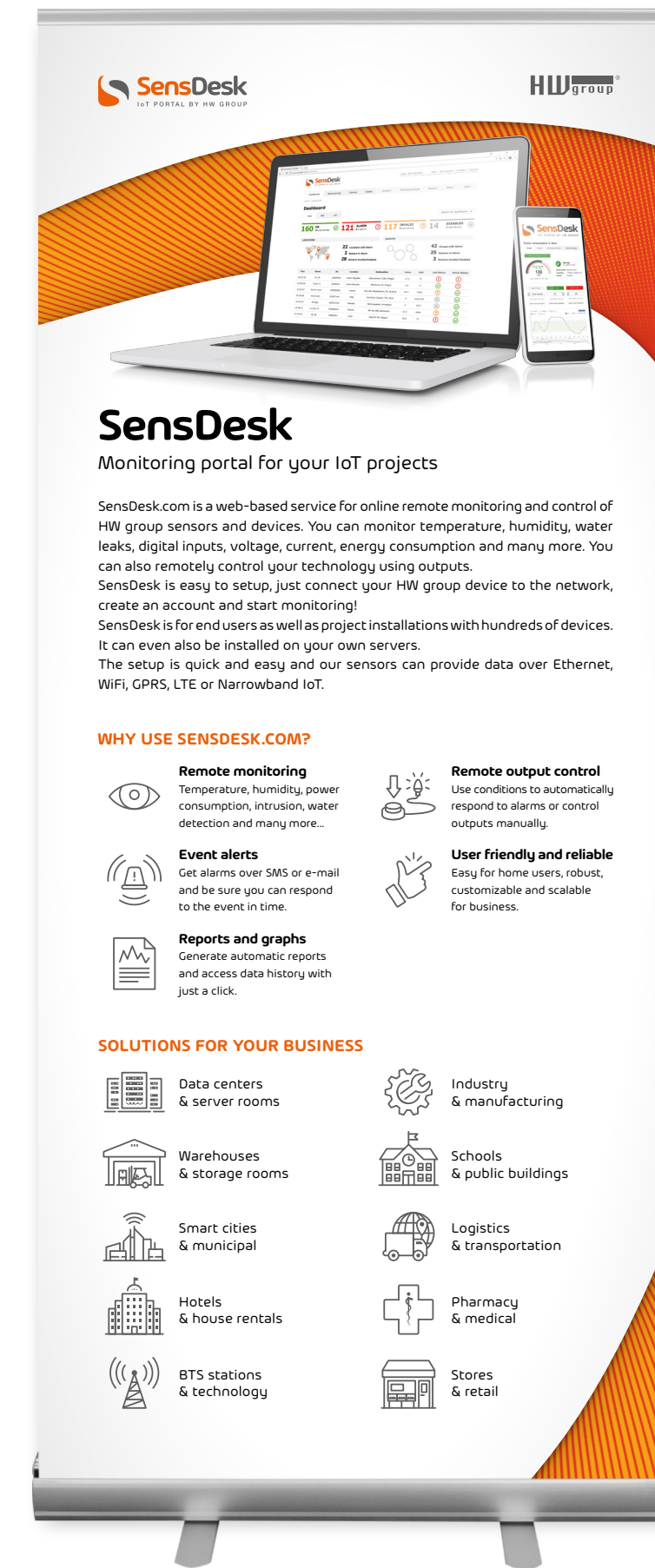
SD-Devices

Projects: Dashboards, Device groups, Locations, User management, Graphs

- SD-2x1Wire**: Up to four sensors of temperature, humidity, voltage, current and more.
- SD-WLD**: Water leak detection using a sensitive cable with a simple installation.
- SD-2xIn**: Two inputs for door contacts, motion, smoke, water presence or fire detectors.
- SD-2xOut**: Can be controlled directly or using conditions from the SensDesk portal.

www.SensDesk.com www.hw-group.com

SensDesk



SensDesk
Monitoring portal for your IoT projects

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- Schools & public buildings
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- Pharmacy & medical
- Stores & retail

Where to download

All marketing materials are part of the marketing package.

Download the package
“Marketing Materials”

Then go to folder Products, then folder

- **Devices** – for flyers, pictures, roll-ups etc. for individual devices
- **Sensors** – for all materials concerning sensors
- **Software** – for materials about SensDesk Technology

Contact jbresinova@hwg.cz with any questions or requests.



Thanks for attention

www.hw-group.com