



# Damocles2 2404

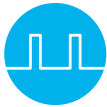
Secure industrial I/O with PoE and telco -48V power options



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 9–30 VDC, -48 V 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

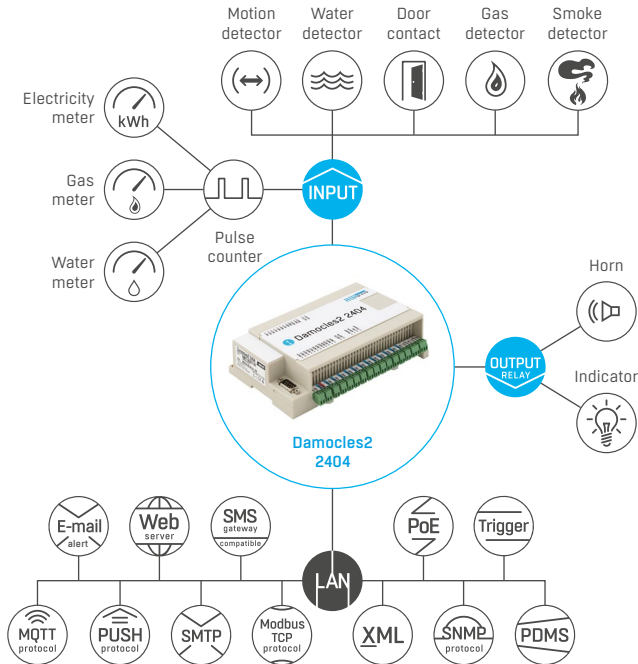
To send an alarm SMS whenever a DI state changes, use the HWg-Trigger software, or a HWg-SMS-GW gateway in the same LAN

Examples for programmers on using the product are available in 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

## 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



## Main changes in the 2<sup>nd</sup> generation

	1 <sup>st</sup> generation Damocles	Damocles2 2404
Extended IP Filter	✗	✓
SNMPv3	✗	✓
HWg-PUSH (SensDesk portal)	✗	✓
NetGSM (HWg-SMS-GW3)	✗	✓
Virtual Output (XML)	✗	✓
Pulse counter (S0 pulse)	✗	✓
HTTPS	✗	✓
IPv6	✗	✓
MQTT (IoT portals)	✗	✓
Group Alarm	✓	✗

## Versions and related products



**Damocles2 2404**

24× DI, 4× DO relay, stand-alone device



**Damocles2 2404 set**

24× DI, 4× DO relay, includes a power adapter



**Damocles2 1208 set**

12× DI, 8× DO OC, includes a power adapter



**Damocles2 MINI set**

4× DI, 2× 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

Ethernet	
Interface	RJ45 (100BASE-Tx)–10/100 Mbps, supports PoE (Power over Ethernet)
Supported protocols	Modbus/TCP, HTTP, NTP, SMTP, netGSM, HWg-PUSH, SNMP, XML
SNMP compatibility	ver. 1, partial ver. 2, ver. 3

Digital Inputs (DI)	
Port	I1 – I24
Type	24× digital input (supports NO/NC Dry contact)
Pulse counter	12× 32-bit

Digital Outputs (DO)	
Type	OUT1, OUT2, OUT3, OUT4 / relay contacts (NC-COM-NO)
Max. load	Max. 4A / 24V

Logger	
Internal memory	250,000 records
Recorded values	DI, DO
Power	9–30V DC, -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	179×46×116 mm
Mass	400 g

## Configuration interface

Damocles2 2404		GENERAL				
Digital Inputs (DI)		Name	ID	Current Value	Alarm Alert	Counter
General	Binary 1	1	0(OFF)	Active if on	0	
	Binary 2	2	0(OFF)	Disabled	11	
	Binary 3	3	0(OFF)	Disabled	7	
	Security	Binary 4	4	0(OFF)	Disabled	10
	SNMP	Binary 5	5	0(OFF)	Disabled	2
		Binary 6	6	0(OFF)	Disabled	0
	Modbus	Binary 7	7	0(OFF)	Disabled	0
		Binary 8	8	0(OFF)	Disabled	0
	Email	Binary 9	9	0(OFF)	Disabled	0
		Binary 10	10	0(OFF)	Disabled	0
	GSM	Binary 11	11	0(OFF)	Disabled	0
		Binary 12	12	0(OFF)	Disabled	0
	Log & Time	Binary 13	13	0(OFF)	Disabled	0
		Binary 14	14	0(OFF)	Disabled	0
	Portal	Binary 15	15	0(OFF)	Disabled	0
		Binary 16	16	0(OFF)	Disabled	0
	MQTT	Binary 17	17	0(OFF)	Disabled	0
		Binary 18	18	0(OFF)	Disabled	0
	Inputs	Binary 19	19	0(OFF)	Disabled	0
		Binary 20	20	0(OFF)	Disabled	0
	Outputs	Binary 21	21	0(OFF)	Disabled	0
		Binary 22	22	0(OFF)	Disabled	0
	Virtual Outputs	Binary 23	23	0(OFF)	Disabled	0
		Binary 24	24	0(OFF)	Disabled	0
Detekce úniků	Detekce úniků					
System	Comm Monitor 1	123	0(OFF)	Disabled	1414288211	