

Damocles2 2404

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





Relay outputs





Pulse counter



Weh server



E-mail notifications

SNMP

protocol





Modbus TCP protocol

Damocles2 2404 provides 24 digital inputs (DI) for dry contact detectors. All digital inputs feature **SO 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

When a DI state changes, the device sends an e-mail, SMS, SNMP Trap, or activates a remote relay at another Damocles2 unit

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

All inputs feature 32-bit pulse counters that retain their value even if the power fails

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)

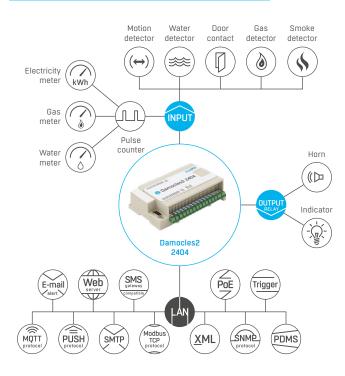
Supports "SMS + Ring" function

MQTT compatibility allows connecting to IoT Hub, MS Azure, AWS IoT, Bluemix Internet of Things and other cloud services

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 2nd generation

	1 st generation Damocles	Damocles2 2404
Extended IP Filter	×	✓
SNMPv3	×	✓
HWg-PUSH (SensDesk portal)	×	✓
NetGSM (HWg-SMS-GW3)	×	~
Virtual Output (XML)	×	✓
Pulse counter (SO 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× D0 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

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Back-Up UPS Lite Backup power supply. 12 V, 1,3 Ah

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)	

Digital Inputs (DI)	
Port	11 - 124
Туре	24× digital input (supports NO/NC Dry contact)
Pulse counter	12× 32-bit

Digital Outputs (DO)	
Туре	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	9–30 V DC, -48 V, 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

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