



Damocles2 1208

Industrial I/O with enhanced IP security and OC outputs



Digital inputs



Open collector outputs



Pulse counter



Web server



E-mail notifications



SNMP protocol



MQTT protocol



Modbus TCP protocol

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

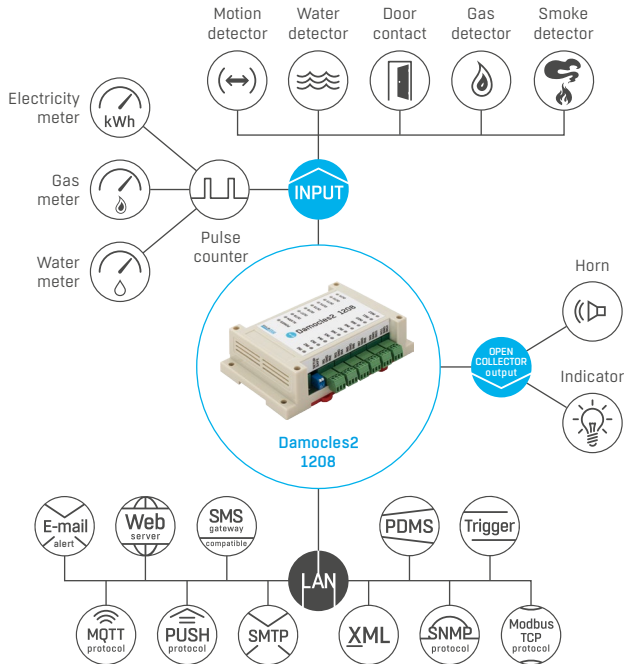
To send an alarm SMS whenever a DI state changes, use the HWg-Trigger software, or a HWg-SMS-GW gateway in the same LAN

Examples for programmers on using the 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 2nd generation

	1 st generation Damocles	Damocles2 1208
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 1208
12× DI, 8× DO OC,
stand-alone device



Damocles2 1208 set
12× DI, 8× DO OC,
includes a power adapter



Damocles2 2404 set
24× DI, 4× DO relay,
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
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 – I12
Type	12× digital input (supports NO/NC Dry contact)
Pulse counter	12× 32-bit

Digital Outputs (DO)	
Type	4× open collector
Max. load	50 V, max. 500 mA / output, max. 1,500 mA all 8 outputs

Logger	
Internal memory	250,000 records
Recorded values	DI, DO
Power	9–30 V 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

The screenshot shows the configuration interface for the Damocles2 1208 device. The interface is titled 'Damocles2 1208' and has a 'GENERAL' tab selected. On the left, there is a navigation menu with options: General, Digital Inputs (DI), Digital Outputs (DO), Security, SNMP, Modbus, Email, GSM, Log & Time, Portal, MQTT, Inputs, Outputs, Virtual Outputs, and System. The main content area shows the 'Digital Inputs (DI)' configuration table:

Name	ID	Current Value	Alarm Alert	Counter
Binary 1	1	0(OFF)	Disabled	11
Binary 2	2	0(OFF)	Disabled	7
Binary 3	3	0(OFF)	Disabled	10
Binary 4	4	0(OFF)	Disabled	2
Binary 5	5	0(OFF)	Disabled	0
Binary 6	6	0(OFF)	Disabled	0
Binary 7	7	0(OFF)	Disabled	0
Binary 8	8	0(OFF)	Disabled	0
Binary 9	9	0(OFF)	Disabled	0
Binary 10	10	0(OFF)	Disabled	0
Binary 11	11	0(OFF)	Disabled	0
Binary 12	12	0(OFF)	Disabled	0
Comm Monitor 1	123	0(OFF)	Disabled	0

Below this, the 'Digital Outputs (DO)' configuration table is shown:

Name	ID	Current Value	Mode
BinOut 1	151	0(OFF)	Manual
BinOut 2	152	0(OFF)	Manual
BinOut 3	153	0(OFF)	Manual
BinOut 4	154	0(OFF)	Manual
BinOut 5	155	0(Lock)	Manual
BinOut 6	156	0(Lock)	Manual
BinOut 7	157	0(Lock)	Manual
BinOut 8	158	0(Lock)	Manual

The interface also shows a 'Version: 3.2.3' indicator at the bottom.