

Damocles 2404i

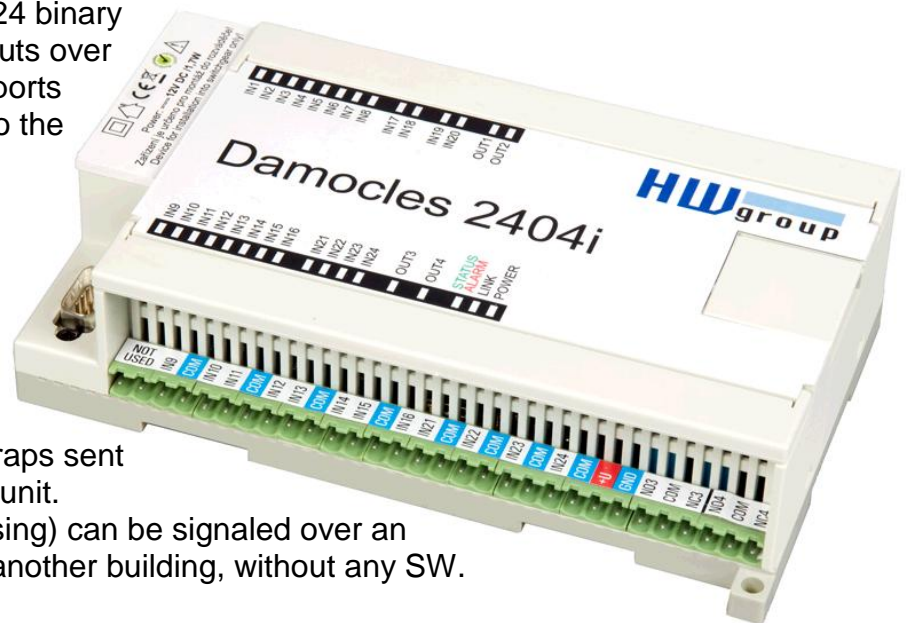
24 dry contact inputs and 4 relays controlled over an IP network (Ethernet).
 Built-in web server, Box-2-Box mode, alarm alerts (e-mail and SNMP trap).

Damocles 2404i provides access to 24 binary inputs (for contacts) and 4 relay outputs over an IP network. The 2404i model supports one temperature sensor connected to the RS-232 interface.

Upon closing the selected inputs or their combination, Damocles sends an e-mail (2 recipients) or a SNMP trap (up to 4 recipients).

Box-2-Box mode

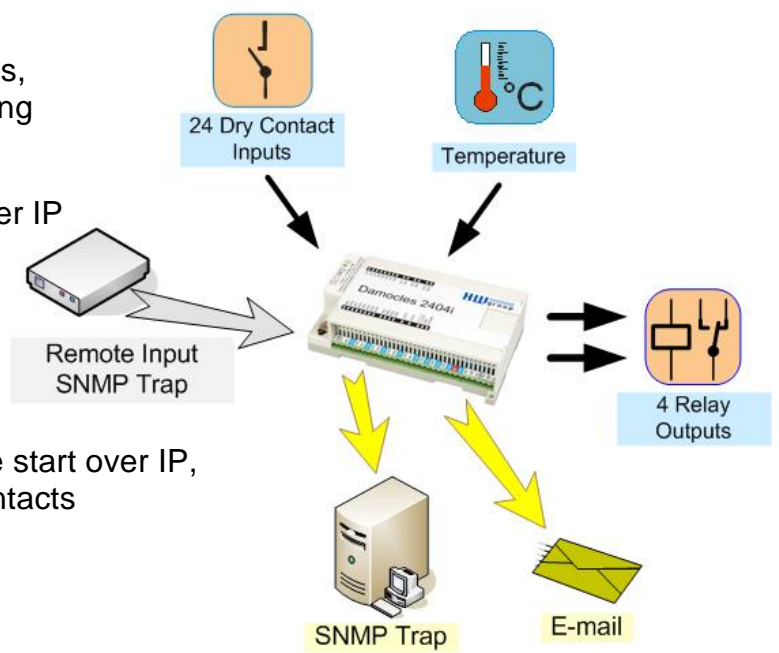
A relay can be controlled by SNMP traps sent from another Damocles or Poseidon unit. For instance, UPS state (contact closing) can be signaled over an IP network in a monitoring centre in another building, without any SW.



Contact closed / opened	>>	SNMP trap and E-mail is sent
Temperature too high	>>	Specified relay is activated
Input combination appears	>>	SNMP trap and E-mail is sent
Input state change on device 1	>>	Switch outputs on device 2 over IP

Application examples

- Remote rack monitoring**
 Open door indication, circuit breaker states, temperature, remote restart / door unlocking
- Intelligent buildings**
 Equipment monitoring, building control over IP
- SCADA systems**
 Connection of external inputs to multiple systems / independent applications
- UPS / back-up generator monitoring**
 Fuel level, diesel generator status, remote start over IP, monitoring of temperature and service contacts
- IP-based security systems**
 - Surveillance systems (sensor states)
 - Equipment status, access control systems



Basic features

- Installation in 10 minutes, no software is necessary
- Embedded WEB server / graphical UI
- **Control of outputs:**
 - WEB interface
 - Local condition (thermometer / other input)
 - Remote networked output (Box-2-Box mode)
- **Alarm alerts**
 - E-mail
 - SNMP trap
 - Activation of a remote output
 - PD Trigger application: SMS / Pop-Up window / Shutdown Windows / start an application
- Inputs and their states can be named (e.g. I4 "Tank 7" 1 = "full", 0 = "empty")
- Group alarms – e.g. "Warning - overheating" alarm is raised when Door = Closed, Temperature exceeds 40 °C for at least 5 minutes, AirConditioning = Off
- Different alarm alert recipients can be specified for individual inputs (4 SNMP trap destinations, 2 e-mail destinations)

Damocles 2404i	
• Inputs (relay contacts):	24
▪ Pulse counter	Yes
• Outputs (relay contacts):	4
▪ Box-2-Box mode	Yes
• Temperature sensors	1
• SNMP:	Yes
• Modbus/TCP	Yes
• E-mail alerts:	Yes

Applications in IT:

- Damocles works with more than **60 NMS systems** (LoriotPro, Nagios, SNMPc, HP OpenView, IBM Tivoli, MRTG, Intellipool, ...)
- **HWg SDK** (Software Development Kit): Libraries and examples (VB, C#, .NET, Borland / Microsoft C++, Borland Delphi, JAVA, PHP)

Protocols:
• SNMP
• Modbus/TCP
• XML (over HTTP)
• E-mail
• SNMP trap
• NTP

Industrial applications:

- Works with most SCADA systems (OPC server and I/O server over Modbus/TCP)
- "Soft-PLC" Windows application for remote access to the units, measuring and control

Accessories



PowerEgg



Damocles 1208



Door Contact



Damocles 2404i



Damocles MINI

Damocles 2404i SET	Damocles 2404i quick start set (includes AC adapter, CD, etc.)
Damocles 2404i	Damocles 2404i unit only, no accessories
PowerEgg	110/230V mains voltage sensing and control
Damocles 1208	Damocles 1208 unit only, no accessories (12DI, 8 DO – open collectors)