

# Damocles model MINI

*Controls 2 relays and monitors 4 digital inputs over Ethernet*

Damocles MINI contains 2 relay outputs (2x switching contact) and 4 dry contacts. You can track values and control relays using your web browser or using any software that communicate over SNMP, XML or Modbus/TCP.

On pre-defined change of the input state Damocles send alarm over e-mail or SNMP Trap. Using added software you can log the values or redirect the alarm notification to SMS in GSM.

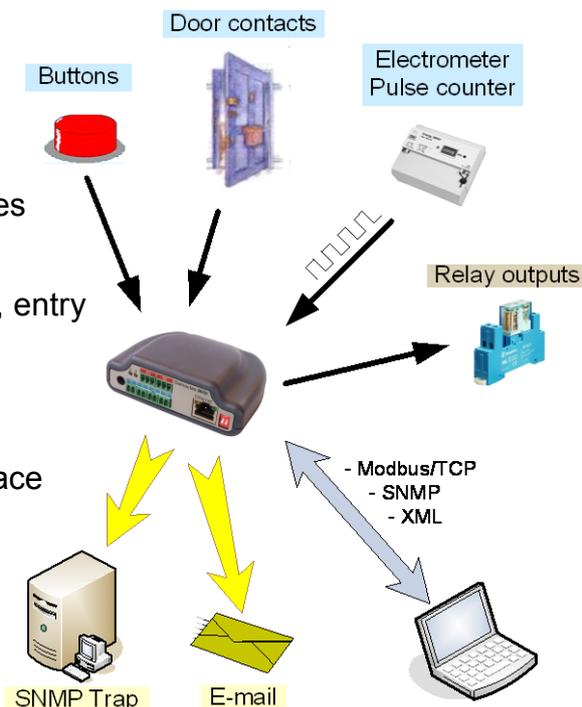
All inputs contains pulse counters and can be directly connected to pulse output of electrometer (for counter) a remotely measure the consumption of electricity.



- **4 dry contacts** inputs with 32 bit pulse counters
- **2 relay outputs** controlled over Ethernet
- Sending alarm state notification by e-mail or SNMP Trap to many users (up to 4 destination)
- **Conditions for raising alarm state** basic intelligent included in the unit – e.g. door contact will raise alarm only when the security system is switch on

## Application examples

- **Controlling relay over Ethernet:** 3 clicks of mouse to switch on relay
- **Measure of power consumption over IP:** Real-time consumption measurement of electricity, gas, water ...
- **SCADA systems:** connecting of external inputs, counters and outputs for signalization
- **Monitoring of backup sources:** UPS a Diesel-aggregates
- **Security:** supervising of security sensors over IP
- **Connecting of systems:** Fire systems, security systems, entry systems, states of elevators ...
- **Camera systems:** connecting of external sensors (door contact, motion sensor)
- Controlling of devices using intuitive graphic WWW interface
- **Remote control over Ethernet:** Opening of entry doors, gates ...
- **Counting of people/cars:** Counting number of people that goes through



## Basic feature

- **4 digital inputs** – dry contacts
- **2 digital outputs** – normally open, normally closed, relay contact
- **Pulse counter** for each input (32 bits)
- WEB server included
- **Device not need special software**
- **Graphic WWW interface** - easy setup
- From web you can control relay outputs and supervise digital inputs
- **Each input and ON/OFF state can be renamed** (e.g. „Tank2“ and „Full“/“Empty“)
- Every input can raise alarm state (Single Alarm)
- 2 Alarms group support alarm raising condition on inputs and can be used to control outputs.
- Alarm state notification over **SNMP Trap** or **E-mail**.
- Each alarm have defined 4 IP address as SNMP Trap destination and 4 e-mail address for sending E-mail
- Damocles uses open communication protocols (**SNMP**, **XML**, **Modbus/TCP**)
- Damocles keeps **actual time** (automatic synchronization over NTP)
- **Security including password**, IP addresses range, HW security of configuration changes
- Package of supporting programs and utilities including also support utility for Linux.
- Working with most of **SCADA/HMI** systems (**OPC server** and I/O server over Modbus/TCP) e.g. Wonderware's InTouch
- **SDK (Software Development Kit)** development libraries + examples (**VB**, **Delphi**, **C**, **C#**)



WWW interface – FLASH Setup

## Condition alarms (Group Alarm)

Damocles MINI support 2 condition alarms for inputs, where the alarm state is raised only when the inputs met the condition. The condition is defined by 2 groups of inputs. In these 2 groups the inputs a logically connected by AND and OR. Group alarm can send SNMP Trap or E-mail to defined destination or switch on/off one of outputs.

- Easy temperature regulation independent on the network connection. Switching sensor of temperature is connected to the input.
- **Alarm detection** when the window is opened or unauthorized person movement will raise the alarm only when the office is locked and the security system is switch on.

## Ordering numbers of products

|                         |                        |   |
|-------------------------|------------------------|---|
| <a href="#">600 250</a> | <b>Damocles MINI</b>   | Damocles model MINI (4 digital inputs, 2 relays )                       |
| <a href="#">600 231</a> | <b>Damocles 2404</b>   | Damocles model 2404 (24 digital inputs, 4 relays, 1 temperature sensor) |
| <a href="#">600 120</a> | <b>3x Door contact</b> | 3x door opening sensor  |
| <a href="#">600 237</a> | <b>PowerEgg</b>        | Detection of external AC, controllable AC output                        |