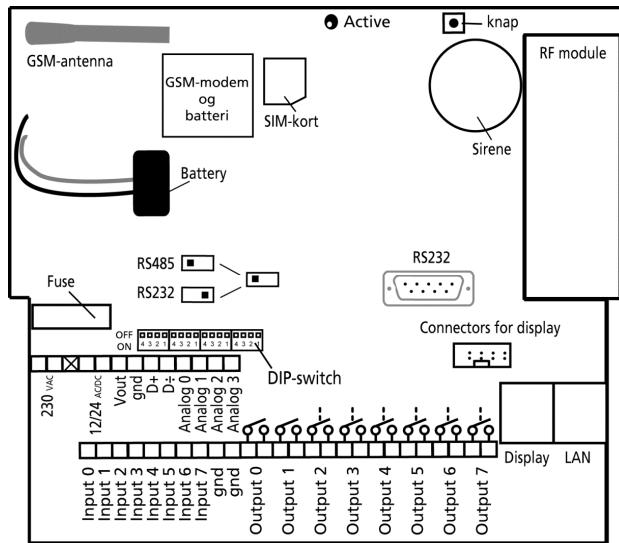


Data Sheet for Master IO



DESCRIPTION

The multiGuard Master IO GSM unit is adapted for remote controlled management, measurement and collection of technical alarms via the via 2G and 3G GSM network. Mounted in an IP65 box. Is able to control electrical functions by activation of relays via text messages, phone calls or the Profort portal on the Internet. Gives alarm as text message, email or DTMF call by influence of alarm inputs. Is able to measure e.g. temperature, pressure and humidity with analogous measuring equipment, log the measurements, notify in case of voltage errors and when the voltage returns.

The multiGuard Master IO is the larger unit with combined 230VAC / 12-24VAC/DC supply. The unit has an expanded analogue log in order to save analogue measurements for up to 4 years. The unit has an option for connecting a 9V rechargeable battery and has a 10VDC output for supply of, for instance, external units.

Particularly suitable for:

- Cold and freeze storage
- Alarm, slurry tanks (4 tanks)
- Heat control
- Level measuring
- Alarm as text message and voice message for 25 receivers
- Logging of temperature
- Built-in clock and calendar for light control and alarm
- Option for expansion with wireless 868 MHz module

SPECIFICATIONS

Relay outputs	8 Max load: 6A at 230VAC/35VDC
Digital inputs	8
Both gnd/24VDC activation	Yes
Digital input high (gnd)	Interrupted or min 3VDC – max 12VDC
Digital input low (gnd)	Max 1V, 2mA
Digital input high (24VDC)	Min 18VDC – max 30VDC, 2 mA
Digital input low (24VDC)	Interrupted or max 1VDC
Galvanic separation	Yes
Input 0	Alarm or connection/disconnection (pulse or level from bypass switch)
Input 1	Alarm or pulse/minute counter (max. 10 Hz, 6 numbers)
Input 2	Alarm or pulse counter (max. 10 Hz, 6 numbers)
Input 3	Alarm or pulse counter (max. 10 Hz, 6 numbers)
Analog input	4
Input 0 - 3	0-10 V, 0/4-20 mA, PT100 or Profort temperature sensor PTC or as digital input

Supply	230V AC/DC, 12-24 V AC/DC, $\pm 10\%$ min. 0,5 A. Supply must not be grounded.
Power supply included	No
Battery	Internal rechargeable NiMH (acquisition)
10V/DC outlet	Yes, max 100mA

Dimensions

Design	IP65 box
Size	210x180x100mm
Weight	1250g

Power consumption, typically

– idle mode	30 mA (12VDC supply)
– all 8 relays activated	120 mA (12VDC supply)

Antenna

Internal	Interior
External	Mounting via SMA-plug option

Temperature

Operation	$\pm 20-55$ °C
Stock	$\pm 30-65$ °C

Other connections

RS232 for connection with PC or PLC	Holder for SIM micro-card
RS485 for connection with e.g. MODBUS	Plug for battery
AUX (mini-USB) for e.g. GPS and humidity measurer	Plug for touch display
Plug for 868 MHz wireless module	

FUNCTIONS

Alarm receivers

Number 25 (up to 8 zones/areas)	Text message
Call with DTMF tones	Email
SIA-IP protocol	Via Internet
Alarm for latest user	Set-up only for acknowledged users
Easy change of receiver order	
Acknowledgement for alarm reception with call from DTMF tones	

Log

Analogue log, measurement every ½ hour	150.000 (e.g. more than 5 years of history for one input)
Event log, alarm and set-up	256

Programming

PC Program	Quick set-up connected via RS232 or GPRS/Internet
Text message	Send text from mobile telephone
The Profort web-portal	via www.masterview.dk

Other functions

Macros for commands:	20
Calendar:	36 activities (every weekday, specific date)
Delayed connection:	30 sec. connection/disconnection in surveilled zone
Filter time on inputs:	10 sec. – 64 hours
Alarm only every 15 min.	Used with e.g. PIR movement sensor
Power alarm:	Never, immediately or after 30 min. (9V ACCU is required)
Build-in Siren for alarms.	Acknowledgement of alarm reception in case of call and '#-key' with DTMF-tones
