

RACK & ENVIRONMENT MONITORING SYSTEM

The RAMOS (Rack Monitoring System) is designed to be deployed within a rack to monitor its internal and external environment. As a network attached device, the RAMOS can report the status of sensors deployed in and around racks to any location worldwide and using SNMP traps can integrate with any network management software such as HP OpenView.

Temperature, humidity and door status, to name but a few, can be monitored and alarms automatically triggered if the sensor value goes outside of the user safe range. The sensor information can be viewed through a standard web-browser or via network management software. In the case of an alarm being generated, notification can be sent via SNMP trap into network management software or an email alert generated to an individual or group email address for immediate corrective action to be taken.

The various models of RAMOS ensure that you get the functionality that you require without having to pay for features that you don't want.

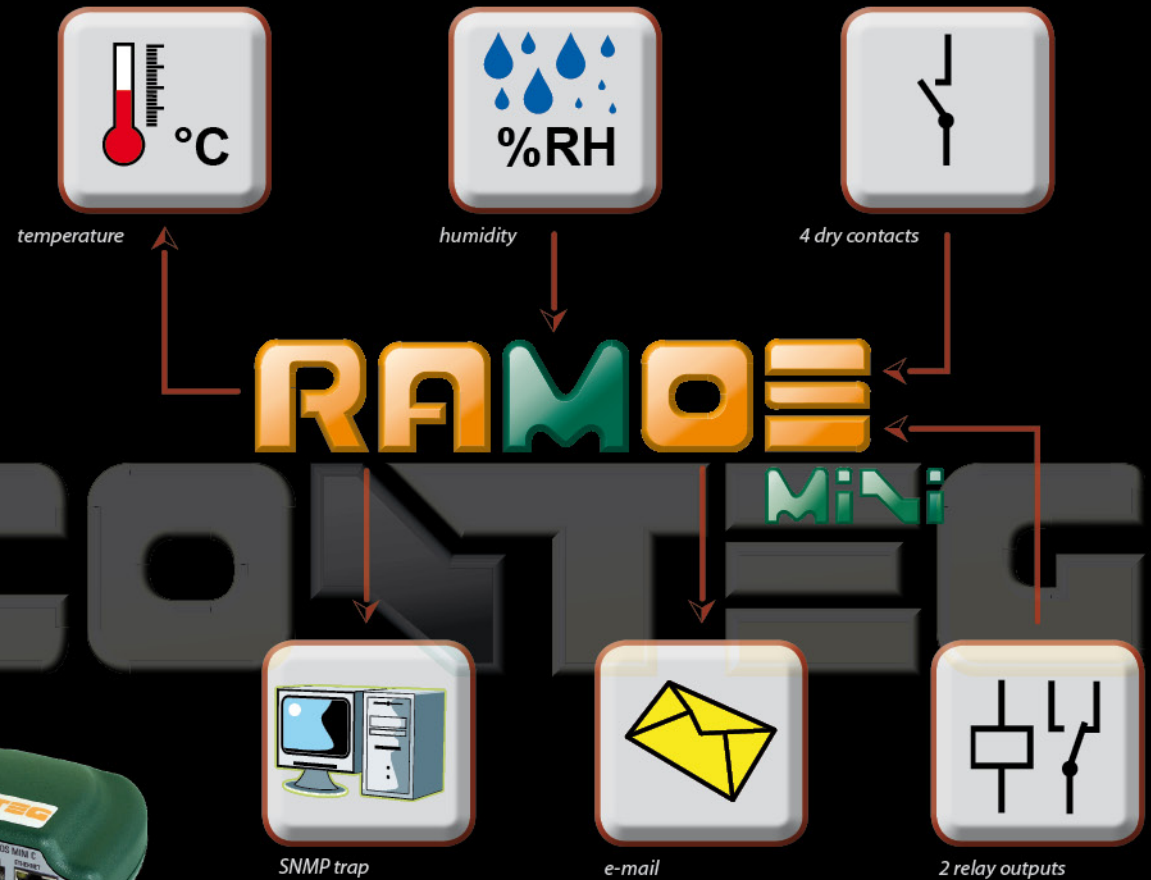
:: rack & environment monitoring system



RAMOS Mini A - ideally suited for simple applications where you wish to monitor temperature and/or humidity in the cabinet and alert if they are out of range

RAMOS Mini B - can support up to three temperature and/or humidity sensors and additionally four dry contacts so that other sensors, for example flood detector or door contact can be monitored

RAMOS Mini C - combines the functionality of the B unit with the ability to control equipment external equipment, such as automatic door handlers and electronic locks



Code	Sensors	Inputs	Outputs
RAMOS Mini A	up to 2	-	-
RAMOS Mini B	up to 3	4	-
RAMOS Mini C	up to 4	4	2

Standard equipment:

1 RAMOS Mini unit, 1 temperature sensors 1-Wire, 1 door contact (only RAMOS B and C), 1 EU version 12V wall plug adaptor (UK, US and other versions upon request), Installation CD (RAMOS Setup)

- 2 outputs (relay switch contact)
- 4 inputs to connect dry contacts
- Up to 4 temperature or humidity sensors (dependent on type of RAMOS Mini unit)
- For sensors (up to 10 meters) standard phone switches, cables, and RJ11 or RJ12 connectors can be used
- Contact switching can send e-mail or SNMP trap to several recipients
- Wide range of accessories
- No specialized SW necessary, simple RAMOS Setup utility
- Possibility to connect to every building monitoring system in the industry, IT and networks
- Support and plug-in modules for many NMS applications (LoriotPro, Nagios, SNMPC, HP OpenView, IBM Tivoli, MRTG and others)
- Built-in graphic web interface for configuration and value monitoring
- 1 RAMOS Mini unit can monitor up to 8 external sensors (4 contacts, 4 sensors on a bus)
- 1 RAMOS Mini unit can control two outputs (relay switch contact up to 50V DC or voltage output for external relay)
- 1 output can be used for local alarm signal
- Each sensor has its own unique ID
- Warning of alarm state over email, SNMP trap, SMS (over SW)
- Open communication protocols (web, email, SNMP, XML, Modbus/TCP)
- Security: password, IP addresses range, HW security of configuration changes
- Support of majority of SCADA systems (OPC server and I/O server over Modbus/TCP)
- SDK (Software Development Kit) development libraries + examples (VB, Delphi, C, C#)



RMS-STH-02



RMS-ST-05

RAMOS accessories

Code	Description
RMS-ST-01	1-Wire Temperature sensor on a 1 meter long cable with RJ12 connector
RMS-ST-02	1-Wire Temperature sensor on a 3 meter long cable with RJ12 connector
RMS-ST-03	1-Wire Temperature sensor on a 10 meter long cable with RJ12 connector
RMS-ST-04	1-Wire Temperature sensor, rack mounting kit, 3 meter long cable, 2x RJ12 connector
RMS-ST-05	1-Wire Temperature OUTDOOR sensor on a 3 meter long cable with RJ12 connector
RMS-SH-01	1-Wire Humidity sensor, 1 meter long cable, RJ12 connector
RMS-SH-02	1-Wire Humidity sensor, 3 meter long cable, RJ12 connector
RMS-STH-02	One wire temperature and humidity sensors, rack mounting kit, 3 meter long cable, 2x RJ12 connector
RMS-DE-01	Optical smoke detector with relay output
RMS-DE-02	PIR motion detector
RMS-DE-03	Flammable gas detector
RMS-DE-04	Flood detector
RMS-DE-05	Broken glass dual detector
RMS-CON-04	Hub for connecting of 2 sensors to 1-Wire bus
RMS-CON-05	Hub for connecting up to 5 sensors to 1-Wire bus
RMS-MK-01	Magnetic contact, fixing bracket (universal mounting) and connection accessories included, VdS G, 2,5 m
RMS-MK-02	Magnetic contact, fixing bracket (universal mounting) and connection accessories included, VdS C, 2,5 m
RMS-MK-03	Simple door contact
RMS-PWR-01	PowerBox, remote switching external devices up to 230V/10A, power detection feature *
RMS-PWR-02	12V / 1.3Ah backup power supply 12V DC, 15V AC input, EU 15V AC power adaptor included
RMS-AS-01	Acoustic siren with LED signalling, 120 dB
RMS-PW-01	Europe plug power adaptor 12V / 0.5A
RMS-PW-02	USA plug power adaptor 12V / 0.5A
RMS-PW-03	UK plug power adaptor 12V / 0.5A
RMS-PW-04	Power adaptor with IEC-320 C14 power plug input



RMS-PWR-01



RMS-MK-03