

# **RMS3 compact - Successor of RMSc2**

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# WHY IS MONITORING IMPORTANT ?

- „Lights out“ Datacenter
- Dependency on physical conditions becomes more critical
- Tool to avoid oversized power and cooling infrastructure
- It helps to control cooling and power on computing demand
- Monitor heat dissipation to nature

# SUMMARY

- Small, compact tool to..
  - Collect Sensor information easily
  - Create actions out of sensor status
  - Increase operational security and reliability
  
- Use state-of-the-art..
  - Digital sensor technologies
  - Latest secure encryption standards incl. certificates upload options
  - Protocols for data transmission and management
  - Optional cloud connectivity with the MQTT protocol

# THE NEW CONTROL & MONITORING DEVICE: RMS III



Management server

EI. Door Handle  
„@Lock MLR1000“



Any  
Signaling  
Device



PoE-Update-Set

- Works stand-alone or with **Vertiv Software or other network management systems\***
- Alerting via relay outputs, email or network management (SNMP traps)
- TCP / IP Connection via Ethernet 10/100BaseT RJ45
- Support of NTP, SNMPv3, IPv4, IPv6, MQTT
- Configuration via SNMP and Web Browser (http; https)
- Local Log file
- **4 relay out, to be activated by internal logic function**
- *\*also Nagios is supported*

# APPLICATIONS

- Edge (broader sense)
  - Edge Access
  - Network Cabinets
  - Computer Room Installations
- Datacenters
  - NON-Smart-PDU Installations
  - Interface conversion
- Industry 4.0
  - Industrial controls use full set of IT technologies
    - Servers, Network, Software

# HARDWARE

- 12 DI
- 4 DO
- 16 1-wire-sensors
- 24 RS-485 sensor
- 9..30 V DC
- 10/100 BaseT Ethernet
- Serial modem connector
- Accessories
  - 9" – 1U Mounting Plate
  - AC/DC converter available
  - Sensors



# SENSOR SUPPORT



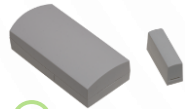
Temperature/Humidity



*Temperature*



Smoke



*Vibration*



Voltage



Door contact



Water



CO



PIR

# WEB INTERFACE



General

General setup

Security

SNMP

Email

GSM

Log & Time

Portal

MQTT

Sensors

Inputs

Inputs Logic

Outputs

Virtual Outputs

System

## RMS3 Compact

GENERAL

### Sensors

Name	ID	Current Value	Safe Range	Hysteresis	Alarm Alert
Sensor 240	1280	-999.9 UNI	0.0 .. 100.0	0.0	Disabled
Sensor 241	13322	2 WLD	0.0 .. 0.0	0.0	Disabled
Sensor 242	19208	29.9 %RH	10.0 .. 60.0	0.0	Disabled
Sensor 243	21316	23.5 °C	10.0 .. 60.0	0.0	Disabled
Sensor 244	25748	2.1 °C	10.0 .. 60.0	0.0	Disabled

### Digital Inputs (DI)

Name	ID	Current Value	Alarm Alert
Binary 1	1	0(Off)	Disabled
Binary 2	2	0(Off)	Disabled
Binary 3	3	0(Off)	Disabled
Binary 4	4	0(Off)	Disabled
Binary 5	5	0(Off)	Disabled
Binary 6	6	0(Off)	Disabled
Binary 7	7	0(Off)	Disabled
Binary 8	8	0(Off)	Disabled
Binary 9	9	0(Off)	Disabled
Binary 10	10	0(Off)	Disabled
Binary 11	11	0(Off)	Disabled
Binary 12	12	0(Off)	Disabled
Binary Logic 13	13	0(Off)	Disabled
Binary Logic 14	14	0(Off)	Disabled



# RMS3 AS SUCCESSOR OF RMSc2

- Market proven advantages of RMSs:
  - Digital (ON/OFF) Sensor support
  - Ease of installation, ease of use, Compact design
  - Boolean Logic
- Improvements with RMS3:
  - Screw Terminal Connectors for Digital Sensors
  - Much more sensors supported, also 1-wire and RS485
  - 4 Relays Outputs (instead of 3 in RMSc2)
  - Temperature Rating -30..+85°C
  - State-of-the art Firmware Features:
  - IPv6 support
    - State- of-the Art **secure** network protocols
    - Access filter (Device Firewall)
    - Cloud Interface already built in (MQTT)
    - Local Log

	RMSIII	RMSc2
Ethernet	100 Mbit	100 Mbit
HTTP	✓	✓
DHCP	✓	✓
SNMP v1/2	✓	✓
SNMP v3	✓	No
SNMP Trap	✓	✓
Trap destinations	5	5
SNTP	✓	✓
HTTPS	✓	Insecure, Low Performance
SMTP	✓	Relay server only
SMTPv3 TLS	✓	No
E-mail Destinations	5	5
SMS/ netGSM /RS232	✓	No
SMS Destinations	5	No
Logger	✓	No
Logger records	250000	0
MQTT	✓	No
IPv6	✓	No
Certificate Upload	✓	No
DO Local conditions	✓	✓
1-Wire sensors	16	0
1-Wire UNI support	✓	0
RS-485 support	✓	0
RS-485 sensors	24	0
Modbus /TCP	✓	✓
Email Alarm reminder	✓	✓
Email Periodical Status	✓	✓
Power Input 1	9-30V	9-30V
DI (Digital Inputs)	12	12
DO (Digital Outputs)	4	3
DO max load	50V/1A	50V/1A
Operating temperature	-30-85°C	0°C - 45°C

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