

# RAMOS ULTRA



➤ **RAMOS Ultra** is an excellent, expandable monitoring solution for server rooms and data centers – an excellent choice for any design where sensor mapping, smart graphs, intelligent notification or a GSM gateway are required without external software/application. Includes a user-friendly web interface for sensor configuration, data collection and extensive graphing.

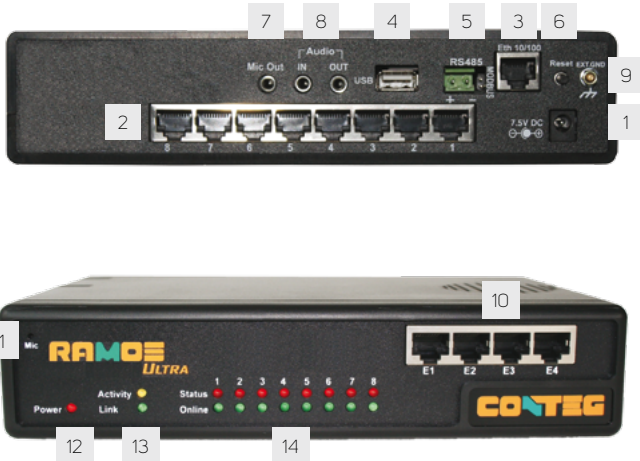
Code	Package includes
RAMOS ULTRA	Monitoring device RAMOS Ultra, power adapter with EU power cord, 1.5 m crossover patch cord, 1U high bracket with screws and installation CD
RAMOS ULTRA-EX-016	RAMOS Ultra Expander 016, power adapter with EU power cord, 1U high bracket with screws and 1.5 m LAN cable
RAMOS ULTRA-EX-I8	RAMOS Ultra Expander I8, power adapter with EU power cord, 1U high bracket with screws and 1.5 m LAN cable
RAMOS ULTRA-EX-D64	RAMOS Ultra Expander D64, power adapter with EU power cord, 1U high bracket with screws and LAN cable 1.5 m
RAMOS ULTRA-EX-D128	RAMOS Ultra Expander D128, power adapter with EU power cord, 1U high bracket with screws and LAN cable 1.5 m
RAMOS ULTRA-EX-D192	RAMOS Ultra Expander D192, power adapter with power cord, 2U high bracket with screws and LAN cable 1.5 m

## DESCRIPTION:

- 8 auto-sense intelligent sensor ports; can be set to input or output
- Monitors up to 500 intelligent sensors using expansion modules (RAMOS Ultra-EX-016 and RAMOS Ultra-EX-I8); daisy-chain connected to 4 expansion ports
- Max. 300 m connection cable (LAN Cat. 5/6) either between expander and RAMOS or between expanders
- Accessories powered via intelligent ports
- Sensors/detectors can be added to uploaded pictures/maps for improved visual monitoring

- Fully embedded TCP/IP and web server
- Internal Linux web-based interface for easy configuration and monitoring
- Network Management System integration
- User/administrator login for improved security (User & Group management)
- 80 virtual sensors for monitoring 3rd-part hardware (via Modbus, SNMP, ping and more)
- Integrates with network management systems via SNMP v1, v2 and Encrypted v3
- Full Modbus support: Modbus master/slave, Modbus RTU and Modbus TCP/IP

- Built-in graphing and data logging, internally or to remote PC
- PHP web-based interface allowing end-user changes (i.e. language translation)
- Battery-backed clock for accurate system date and time
- Clever notification features – email and SNMP traps, SMS/MMS, call, speech and many more
- Can access external GPRS/GSM modem, Bluetooth and Wi-Fi USB adapters



RAMOS Ultra – REAR VIEW	
1	7.5 V DC power input
2	8× intelligent sensor ports (RJ-45)
3	Standard 10/100 Base-T Ethernet
4	USB port 2.0 for GSM/GPRS, Bluetooth or Wi-Fi adapter
5	Modbus connectivity – RS485
6	Reset button
7	Output from int. microphone
8	Input for ext. microphone and output for ext. speaker
9	External ground

RAMOS Ultra – FRONT VIEW	
10	4× expansion ports
11	Internal microphone
12	Power indicating LED
13	Activity/link indicating LED
14	16 LEDs, indicating online status of connected sensors

## RAMOS Ultra / Ultra ACS EXPANDERS:

### RAMOS Ultra-EX-I8

- Adds 8 intelligent ports for intelligent accessories

### RAMOS Ultra-EX-016

- Adds 16 opto-isolated dry contact inputs

### RAMOS Ultra-EX-D64

- Adds 64 dry contacts (IN/OUT) via 16 RJ-45 ports (each with 4 dry contacts)

### RAMOS Ultra-EX-D128

- Adds 128 dry contacts (IN/OUT) via 32 RJ-45 ports (each with 4 dry contacts)

### RAMOS Ultra-EX-D192

- Adds 192 dry contacts (IN/OUT) via 48 RJ-45 ports (each with 4 dry contacts)

## RAMOS OPTIMA



FRONT VIEW



REAR VIEW

➤ **RAMOS Optima** is an accurate, intelligent high-speed monitoring device suitable for one or more racks, where up to 8 intelligent ports are required.

Code	Package includes
RAMOS OPTIMA	RAMOS Optima monitoring device, 1× temperature sensor with 30 cm long cable, power adapter with power cord, 1.5 m crossover patch cord cable, 1U high bracket with screws and installation CD

RAMOS Optima	
1	LED power indicator
2	LED activity/link indicator
3	16 LEDs indicating online status of connected sensors
4	8× intelligent sensor ports (RJ-45)
5	Standard 10/100 Base-T Ethernet
6	7.5 V DC power input

### DESCRIPTION:

- 8 auto-sense intelligent sensor ports; can be set to either input or output
- All accessories powered via Intelligent ports
- Communication via SNMP v1 and v2
- Notification via email and SNMP traps

- Fully embedded TCP/IP and web server
- Internal Linux web-based interface for easy configuration and monitoring
- Battery-backed clock for accurate system date and time
- Syslog (internal/external) and history with sensor graphs
- Network management system integration
- Security login for user and administrator

## RAMOS PLUS



➤ **RAMOS Plus** is an entry model of the RAMOS intelligent range, designed for use in indoor and outdoor cabinets. Available in either standard or GSM options, the latter with a built-in GSM modem and external antenna. Four intelligent ports provide ample opportunity for multiple use. Improved intelligent ports support a full range of accessories, including RAMOS Ultra for intelligent ports.

Code	Package includes
RAMOS PLUS	RAMOS Plus monitoring device, power adapter, 1.5 m crossover patch cord cable, bracket with screws and installation CD

### DESCRIPTION:

- 4 auto-sense intelligent sensor ports; can be set to either input or output
- All accessories powered via Intelligent ports
- Communication via SNMP v1, v2 and v3

- Notification via email and SNMP traps
- Fully embedded TCP/IP and web server
- Syslog and history with sensor graphs
- Network management system integration
- Security login for user and administrator
- Optional built-in GSM modem available upon request

## RAMOS MINI



➤ **RAMOS Mini** is designed for deployment within a single rack, monitoring internal and external environments. Attached to a network, it reports the status of sensors deployed in and around racks to any location worldwide. Through the use of SNMP traps, it can fully integrate with any network management software.

Code	Package includes
RAMOS MINI	RAMOS Mini, up to 3 sensors (temperature and humidity), 1× IN, 1× OUT, incl. RMS-ST-02, RMS-PW-05, straight and angle holder, installation CD

### DESCRIPTION:

- Up to 3 temperature or humidity sensors (with new firmware)
- 1× dry contact input
- 1× output (relay switch contact up to 50 V DC)
- Two alert ranges per sensor
- Notification alarm via email and SNMP trap to several recipients

- Built-in graphic web interface for configuration and value monitoring
- Each sensor comes complete with unique ID
- Alarm updates via email and SNMP trap or SMS (over CONTEG Pro Server Software or 3rd-party software)
- Open communication protocols (web, email, SNMP, XML)
- Security: password
- Optional 255 data point graph view

# ACCESSORIES

## INTELLIGENT ACCESSORIES FOR RAMOS ULTRA, OPTIMA AND PLUS:

Code	Description	RAMOS		
		Ultra	Optima	Plus
RMS-I-ST	One wire temperature sensor with 30 cm cable; can be extended up to 30 m (Cat. 5/6 LAN) via Cat. 5 coupler (included)	+	+	+
RMS-I-STH	One wire temperature and humidity sensor with 30 cm cable. Humidity range 0–100%. Can be extended up to 30 m (Cat. 5/6 LAN) via CAT. 5 coupler (included).	+	+	+
RMS-I-STHB	One wire temperature and humidity sensor in Box with free 1.5 m LAN cable. Humidity range 0–100%. Can be extended up to 300 m (Cat. 5/6 LAN).	+	+	+
RMS-I-AF	Airflow sensor with attached 1.5 m LAN cable (Cat. 5). On/off airflow signal alarm.	+	+	+
RMS-I-AS	Siren & Strobe light with attached LAN cable (Cat. 5) 1.5 m. 100 db siren sound and flashing strobe interval 400x per minute. Cable can be extended up to 30 m (Cat. 5/6 LAN).	+	+	+
RMS-I-DE-01	Smoke detector with attached 1.5 m LAN cable (Cat. 5). On/off smoke detector alarm. Can be connected via dry contact when 9 V battery is used.	+	+	+
RMS-I-DE-02	PIR motion detector with attached 1.5 m LAN cable (Cat. 5). Can be connected in a chain of up to 10 Motion Detector Sensors on a single port. 60° detection angle. 3 m detection range.	+	+	+
RMS-I-DE-04	Spot water sensor with 4.5 m cable. Maximum cable extension 60 m.	+	+	+
RMS-I-DE-06	Rope water sensor with 3 m detection cable. 1.5 m LAN communication cable (Cat. 5) included (max. length 30 m). Protects water-sensitive equipment from potential disaster. Detects battery Acid for short-term exposure. Sensor cable can be extended via LAN cable (Cat. 5e/6).	+	+	+
RMS-I-DE-06-EXT3	3 m sensor rope extension for RMS-I-DE-06; maximum extension 50 m	+	+	+
RMS-I-DE-07	Rope water locate sensor with 3 m length detection cable, 6 m non-detection cable and connection cable 1.5 m; (can be extended by LAN cable (Cat. 5e/6))	+	+	+
RMS-I-DE-07-EXT3	3 m rope sensor extension for RMS-I-DE-07; maximum extension 50 m	+	+	+
RMS-I-DRC	Dry contact with 4.5 m cable, input or output; sources up to 20 mA when used as input. Input voltage range 0 to 5 V.	+	+	+
RMS-I-MK	Magnetic door contact with 4.5 m cable (mounting holder included). Maximum extension 300 m. Open/closed contact switch.	+	+	+
RMS-I-PWR-NO	AC-Sensor controlled relay normally open (110 V / 220 V). 1.5 m LAN cable included; maximum length 30 m. Built-in 10A Fuse. C13 and C14 socket connection. Switch can be controlled by any sensor.	+	+	+
RMS-I-VC	4–20 mA Converter with attached 1.5 m LAN cable (Cat. 5). Collects analog values from a wide array of sensors.	+	+	+
RMS-I-CON	RJ45-RJ45 coupler (Cat. 5e) for sensor cable extension, package of 10 pcs	+	+	+
RAMOS ULTRA-EX-D8-8	Expansion board adds 8 dry contacts (IN/OUT) to one intelligent port (RJ45); each can be configured as input or output (sink up to 20 mA). Maximum length of connection cable (LAN Cat. 5/6) 300 m.	+	–	+
RMS-U-DST	Daisy-chain temperature sensor with attached 1.5 m LAN cable (Cat. 5). Up to 8 sensors can be connected to a single intelligent sensor port in 150 m total cable length.	+	–	+
RMS-U-DST-8	Package with 8 pcs of RMS-U-DST	+	–	+
RMS-U-GSM	USB Modem (Quad- band) with audio cable for connection to RAMOS ULTRA	+	–	–*
RMS-U-GSM-3G	USB 3G modem without audio connection	+	–	–*
RMS-U-RB-8	Box with 8 changeover relay contacts for control (manually or via notification)	+	–	+

\*Require GSM variant of RAMOS Plus

## RAMOS MINI ACCESSORIES:

Code	Description	Package
RMS-ST-02	1-wire temperature sensor with 3 m cable; -10 °C to +80 °C	1 pc
RMS-SH-02	1-wire humidity sensor with 3 m cable; 0–100% RH	1 pc
RMS-STH-01	1-wire temperature & humidity sensor with 3 m cable; -30 °C to +80 °C; 0–100% RH	1 pc
RMS-ST-04	Daisy-chain temperature sensor with 3 m cable; -10 °C to +80 °C	1 pc
RMS-STH-02	Daisy-chain temperature and humidity sensor with 3 m cable; -10 °C to +80 °C; 0–100% RH	1 pc
RMS-DE-01	Optical smoke detector*	1 pc
RMS-DE-02	PIR motion detector*	1 pc
RMS-DE-04	Flood detector*	1 pc
RMS-DE-05	Broken glass dual detector*	1 pc
RMS-VS	Vibration sensor	1 pc
RMS-MK-01	Magnetic door contact with fixing bracket and 2.5 m cable	1 pc
RMS-CON-04	Hub for connecting two 1-wire sensors to 1 Wire bus	1 pc
RMS-AS-01	Acoustic siren with LED signaling, 120 dB*	1 pc
RMS-PWR-01	Power Box, remote switching external devices up to 230 V / 10 A, power detection feature	1 pc
RMS-PW-05	Universal power supply 5 V DC	1 pc
RMS-PW-12	EU plug power supply for accessories 12 V DC	1 pc

\*Requires external power supply 12V DC (e.g. RMS-PW-12)

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