# Mitec RMS31/40S

## Remote measuring station

### Description

Mitec RMS31 and RMS40 are remote measuring stations that can be used to measure temperature, pressure, humidity, CO2, electricity, energy, level, flow, pH and many other parameters in industrial and operational processes.

Up to four (RMS31) or eight (RMS40) inputs can be simultaneously collected per station and communicated via the station's inbuilt modem. Any number of measuring stations can be used in the system.

The Mitec RMS31/40 measuring station is part of the Mitec remote measuring system. The system automatically communicates with remote measuring stations using tele modem or GSM to collect a complete history of the process.

Powerful analysis tools can be used by a central operator, and trend graphs published automatically on the company's local network or website. Alarms using mobile SMS can be set as needed and sent automatically.

The Mitec system helps optimize the operational process, enabling a higher level of customer service and organizational efficiency, as well as improved knowledge and decision-making.

Shared information and traceable documentation add value to each project.

The Mitec RMS31/40 measuring station is manufactured in Sweden by Mitec Instrument AB.

### Features

- Turnkey, easy-to-install measuring stations with built-in GSM or tele communication.
- Automatic monitoring of critical parameters.
- Any sensors can be used in any combination using Mitec SmartCables.
- Swedish made

### System benefits

- Shared information on local network and website
- Alarm via SMS on GSM telephone
- Instant overview of all measurement sites
- Detailed analysis of history and trends

### Function

Measurement sensors are connected to the Mitec measuring station. A time interval is selected for the measuring station to register data from the sensors and store it locally in its own memory.

Different types of sensors can be used with the measuring station. The Mitec system automatically recognizes which type of sensor is connected.



*Mitec RMS31/40 measuring station*

# Technical Data Mitec RMS31/40 remote measuring station

## Data collection

| | |
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| Number of input channels……………. | 4 or 8 universal input channels for sensors connected via Mitec SmartCables. |
| Memory size………………...……… | 128 kbyte or 512 kbyte. |
| Registration interval…………………... | 1 second to 24 hours and manual, selectable in 17 steps. |
| Number of measured values………….. | Nom. 55,000  (RMS40 can be expanded to 240,000) |
| Storage method………………..…..… | Average value or average, min, max. |
| Inputs…………………………………... | DC and AC voltage; DC and AC current; Resistance (eg. Pt-100 or potentiometer) |
| | Thermocouple, thermistor, bridges; Pulses, run-time; Frequency |
| Input selection……………....……… | Automatic adaption. Engineering unit and signal type is shown in  display. |
| Data output…………………...…….. | RS232 (multi-drop) communication interface to Inbuilt modem. |

## Mitec SmartCables and sensors

OPTIONS

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| Mitec SmartCables……………...….. | Available for use with analog signals from sensors and instruments, pulses, status signals for ON/OFF registrations and time measurements. |
| | Refer Mitec SmartCable catalog or www.mitec.se for full listing. |
| Compatible sensors……………...…… | Temperature, humidity, pressure, CO2, electricity, energy, level, flow, pH and most other sensors can be connected with appropriate type of Mitec SmartCable. |

## Communication

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| GSM modem…………………...…... | Inbuilt in RMS31S-G and RMS40S-G. |
| | Quality industrial modem / antenna for use with GSM mobile telephone network. Configuration and testing completed prior to delivery. Includes Telia subscription. |
| Telephone modem………...………… | Inbuilt in RMS31S-M andRMS40S-M. |
| | Quality industrial modem for use with public telephone network. Configuration and testing prior to delivery. |
| Communication protocol……....…….. | PcCom transmits collected information and on-line values. Block oriented with an 8-bit checksum and error correction. Used by all Mitec measurement software. |

## Measuring station

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| Case…………………………………… | Metal cabinet with protection class IP54. |
| . | Case includes all instrumentation and communication. |
| Size…………………………………… | 300 x 200 x 180 mm  exclusive antenna. |
| .. | |
| Power supply……………...………... | Connection to 230V AC powers the inbuilt instrument and modems. |

## ORDERING INFORMATION

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|---|---|
| Article number…………..…..……… | Mitec RMS31S-G measuring station with 4 channels and GSM modem |
| | Mitec RMS31S-M measuring station with 4 channels and telephone modem |
| | Mitec RMS40S-G measuring station with 8 channels and GSM modem |
| | Mitec RMS40S-M measuring station with 8 channels and telephone modem |
| Delivery includes………..…...……… | Mitec remote measuring station |
| | English or Swedish manual |
| Accessories…………...………...……….. | Mitec Monitor analysis and communication program |
| | Sensors,  Isolation amplifiers |

**Mitec Instrument AB**, Box 91, 661 22 Säffle, Sweden

Visiting address: Västra Storgatan 18, Säffle, Sweden

Tel.: +46 53316050, Fax: +46 53316045   info@mitec.se   www.mitec.se