

### Models:

- RD-MG-031/1** – Precision Hand-held Digital Thermometer  
**RD-MG-031/1P** – High Precision Hand-held Digital Thermometer

### Accessories:

- RD-MG-031/zP1** – Probe Pt100, 4 x 300 mm, -40 °C ... +500 °C with factory calibration certificate  
**RD-MG-031/zP1C** – Probe Pt100, 4 x 300 mm, -40 °C ... +500 °C with DAkkS-Calibration certificate (traceable and accredited according to ISO 17025)  
**RD-MG-031/zP2** – Probe TC K, 3 x 300 mm, -100 °C ... +1100 °C with factory calibration certificate  
**RD-MG-031/zP2C** – Probe TC K, 3 x 300 mm, -100 °C ... +1100 °C with DAkkS-Calibration certificate (traceable and accredited according to ISO 17025)  
**RD-MG-031/zP3** – Probe TC K, 3 x 500 mm, -100 °C ... +1100 °C with factory calibration certificate  
**RD-MG-031/zP3C** – Probe TC K, 3 x 500 mm, -100 °C ... +1100 °C with DAkkS-Calibration certificate (traceable and accredited according to ISO 17025)  
**RD-MG-031/zP5** – Moisture/Temperature Probe, 0 % rh ... 100 % r.h. / -30 °C ... +80 °C (only for RD-MG-031/1P) with factory calibration certificate  
**RD-MG-031/zP5C** – Moisture/Temperature Probe, 0 % rh ... 100 % r.h. / -30 °C ... +80 °C (only for RD-MG-031/1P) with DAkkS-Calibration certificate (traceable and accredited according to ISO 17025)  
**RD-MG-031/zC** – Case for RD-MG-031

### Description:

RD-MG-031 is a hand-held thermometer for superior mobile and precision temperature measurement.

In addition to Pt100 resistance thermometers, it can also process signals from typical thermocouples. Thus, temperatures from -200 °C... +1.100 °C can be measured.

The high precision version can be used as a reference instrument.



### Technical specifications:

|                                               | RD-MG-031/1                                                                               | RD-MG-031/1P                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Measuring ranges                              |                                                                                           |                                                                            |
| - Pt100                                       | -200 °C... +500 °C                                                                        | -40 °C... +500 °C                                                          |
| - Thermocouples                               | -100 °C... +1100 °C                                                                       |                                                                            |
| - Humidity                                    | 0 %... 100 % r. h.                                                                        | -                                                                          |
| Accuracy of resistance thermometer type Pt100 | 0.03 K of -50 °C... +200 °C<br>0.05 K of -200 °C... -50 °C<br>otherwise 0.05 % of reading | 0.1 K of -100 °C... +200 °C<br>otherwise 0.1 % of reading                  |
| Accuracy of thermocouple type K               | 0.2 K of 0 °C... 200 °C<br>0.5 K of 200 °C... 1000 °C<br>1 K above 1000 °C                | 0.3 K of 0 °C... 200 °C<br>1 K of 200 °C... 1000 °C<br>1.5 K above 1000 °C |
| Accuracy of humidity readings                 | 1.5 % r. h.                                                                               | -                                                                          |
| Display                                       | Large 4 1/2-digit LC display with backlighting                                            |                                                                            |
| Supply voltage                                | 9 V battery or 9 V rechargeable battery or mains supply                                   |                                                                            |
| Battery life                                  | approx. 20 hours                                                                          |                                                                            |
| Body material                                 | impact-resistant ABS plastic, transparent screen                                          |                                                                            |
| Dimensions (LxWxH)                            | 200x93x44 mm                                                                              |                                                                            |
| Weight (approx.)                              | 350 g                                                                                     |                                                                            |