

# Thermal camera

## MD 9910 Thermal camera

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MD 9910 is a small thermal imager with large ambitions. Frame rate is extremely fast at 50 Hz. 80x80 pixel thermal resolution can show damage on contacts in electrical switchboards or distribution boards, stressed overcurrent or overvoltage protection, or unnecessary friction on motor axle. PCB troubleshooting is made easier by discovering hot spots at close range. At the same time, short focal length allows to go through large areas quickly. Center shot temperature, hot and cold markers give a better sense to the image and its span. Shot images can be immediately transferred to Android device using the app and Bluetooth connection. Span can be set manually to be able to take advantage of its great thermal resolution. Large Li-ion battery allows for 4 to 5h work. It was drop-tested to 2m.



80 x 80  
pixels

### MEASUREMENT FUNCTIONS:

- Temperature;
- Temperature difference.

### KEY FUNCTIONS:

- Very fast frame rate 50 Hz;
- Three markers on screen (hottest, coldest, central);
- 5 different palettes;
- Lock and compare feature;
- Temperature in °C, °F or K;
- LED flashlight;
- Android apps for Bluetooth connection;
- Instant share of image over Bluetooth;
- Shooting images from Android app;
- Rechargeable Li-Ion batteries with long life;
- Internal memory;
- Hold image feature.

### APPLICATIONS:

- Troubleshooting electrical installations (switchboards, contacts, busbars, etc.);
- Troubleshooting electrical equipment (motors, transformers, etc.);
- Building and facility maintenance;
- Field service;
- Energy loss analysis;
- Troubleshooting other installations (pipes, carpentry, windows, etc).

## TECHNICAL SPECIFICATION

| FUNCTION                         |                                                 |
|----------------------------------|-------------------------------------------------|
| IR sensor resolution             | 80x80 pixel                                     |
| Temperature range                | -20 – 380°C                                     |
| Thermal sensitivity/NETD         | 0,1°C @ 30°C / 100 mK                           |
| Thermal accuracy                 | Higher value $\pm 2^\circ\text{C}$ or $\pm 2\%$ |
| Field of vision                  | 21 x 21°                                        |
| Spectral range                   | 8 – 14 $\mu\text{m}$                            |
| Emmisivity                       | 0.01 – 1.0                                      |
| Frame rate                       | 50 Hz                                           |
| Focal length                     | 7,5mm                                           |
| Spatial resolution               | 4,53 mrad                                       |
| Min focus distance               | 0.5m                                            |
| Focus                            | Fixed                                           |
| Display resolution               | 240x320 pxl                                     |
| Color palettes                   | 5                                               |
| Data storage                     | 100 images                                      |
| Data communication               | Bluetooth                                       |
| Storage image format             | Bmp with temperature and emissivity             |
| Operating temperature            | -10°C – 45°C                                    |
| Storage temperature              | -30°C – 55°C                                    |
| Humidity (storage and operation) | < 80%                                           |
| Weight                           | 260g                                            |
| Size                             | 180mm x 60mm x 75mm                             |

## ORDERING INFORMATION



### Standard set (MD 9910)

- MD 9910 Thermal camera
- USB cable
- Non-slip strap
- Carrying case
- Instruction manual

### METREL D.D.

Measuring and Regulation Equipment  
Manufacturer  
Ljubljanska 77, SI-1354 Horjul, Slovenia  
T +386 (0)1 75 58 200, F +386 (0)1 75 49 226  
metrel@metrel.si, www.metrel.si

Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery.  
Subject to technical change without notice.