



DIAS
Infrared Systems

MobIR® M8

The Low-Cost Infrared Camera
for Professionals

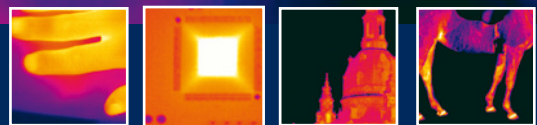
Preventive Maintenance

Inspection of Electrical Installations

Building Thermography

Industrial Thermography

Human and Veterinary Medicine



MobIR® M8 PROPERTIES



The invisible becomes **VISIBLE**

The MobIR® M8 satisfies with the following characteristics:

- Recording and storage of thermal images and videos
- One-hand operation and swiveling touch screen display
- Visual camera, voice comment
- Laser pointer as a pilot light
- USB interface for offline and online image transfer
- Large delivery

The special PLUS is the extensive software package PYROSOFT Compact with live view mode, color palettes, ROIs and reporting functions.

IR/VIS

**IR
Video**

**PYRO-
SOFT**

AF

**Touch-
Screen**

Laser

**4
Hours**

**No US-
Export
License**



Large Package

By default in addition to the IR camera MobIR ® M8, there are a carrying case, two lithium-ion batteries, a charger, USB cable, Video cable, 2 GB mini-SD card, software PYROSOFT Compact and the user guide included.



Software

Live images of the thermal imaging camera as well as on the mini-SD card stored thermal images, visual images of the thermographic camera and video content can be transferred via the USB interface to PC. The included PC software PYROSOFT Compact allows the recording of the live image and the analysis of the transferred thermal images:

- Display with different color schemes and scales
- Definition of ROIs (points and line)
- Integrated reporting function for reporting in Microsoft® Word format

Enhanced functionality offers the optional software PYROSOFT Professional.

Optional Accessories

For better handling, optional sunshield, rubber protection jacket and tripod adapter are also available. Furthermore, a remote control and a high temperature filter (250 °C to 1200 °C) are available.

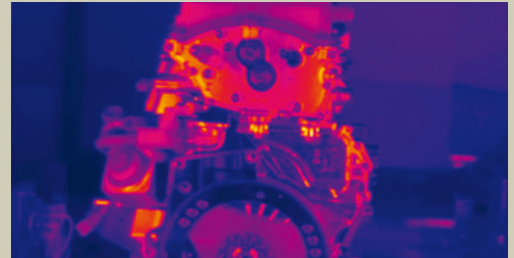
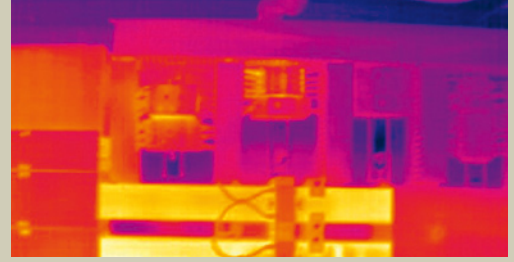


Preventive MAINTENANCE

A wide range of applications for portable infrared cameras for non-contact temperature measurement is in the field of preventive maintenance. Such regular thermographic checks on electrical components and their interconnections under load are useful to detect weaknesses early.

Resistances through conversion of electrical power causes temperature increases that can be made visible. This helps to prevent fires and improve the availability of equipment through timely preventive repairs.

The inspection of electrical cabinets, switchboards and power lines are frequent applications. In addition to measurements on electrical systems and preventive check-ups on mechanical components and equipment are carried out.



BUILDING Thermography

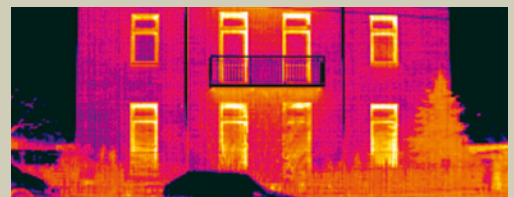
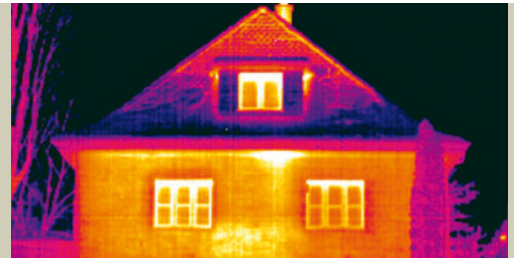
The portable thermal imager MobIR® M8 can be used for quality assurance in the construction and rehabilitation of buildings.

For example, leaks in underfloor heating, heat bridges, errors in electrical or concealed heating and power lines are recognized.

Penetration of moisture, which can lead to a threat to the structure, can be detected. The detection of air leakage in connection with BlowerDoor analyses provides a further example.

An old buildings hidden truss structures and windows are bricked visible.

Building energy and chimney sweep can quickly and reliably detect leaks or insufficient insulation of bodies in the building.



INDUSTRIAL Thermography

Thermographic measurements for the technical diagnostics are performed for process monitoring, control of the reliability and quality assurance.

Industrial properties are, for example: pipelines, pressure vessels, tanks and boilers, as well as electronic assemblies and components.



Human and Veterinary MEDICINE

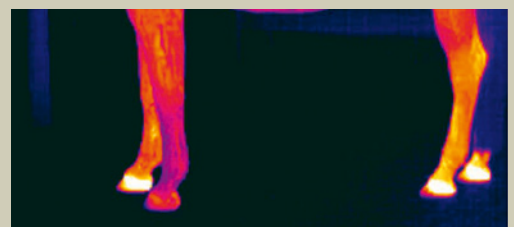
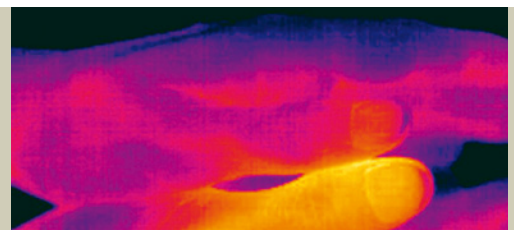
The portable thermal imager MobIR® M8 can be used as a diagnostic tool for early detection of certain diseases and to monitor the recovery process.

Many diseases are announced by a change in the surface temperature. Thermography can provide important information to start early with a therapy.

Inflammation and blood flow can be made visible.

Measurements on the joints and ulcers are also among uses of thermography as well as the routine check at the udder of dairy cows.

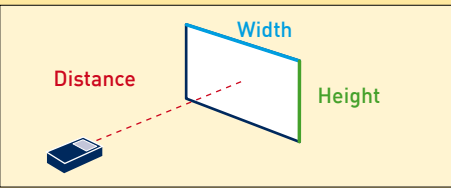
Even for anti-doping controlling in equestrian sports thermal imaging cameras can be used.





MobIR® M8

The Low-Cost Thermal Imaging Camera for Professionals

Spectral range	8 to 14 microns																
Sensor (IR)	Uncooled microbolometer array, 160 × 120 pixels																
Temperature measurement range	-20 °C to 250 °C, optional -30 °C to 350 °C																
Accuracy ¹	2 K (temperature < 100 °C) or 2 % of reading																
Noise equivalent temperature difference ¹	< 0,1 K (30 °C)																
Measurement distance	> 10 cm, manual focus, auto focus																
Opening angle and measuring field of optics	Information: measurement field width in m × height in m <table border="1"> <thead> <tr> <th>Measurement field distance in m</th> <th>Standard 21° × 16°</th> <th>Option 32° × 24°</th> <th>Option 8° × 6°</th> </tr> </thead> <tbody> <tr> <td>0,1</td> <td>0.037 × 0.028</td> <td>0.057 × 0.043</td> <td>-</td> </tr> <tr> <td>1</td> <td>0.37 × 0.28</td> <td>0.57 × 0.43</td> <td>0.14 × 0.10</td> </tr> <tr> <td>10</td> <td>3.7 × 2,8</td> <td>5.7 × 4,3</td> <td>1.4 × 1.0</td> </tr> </tbody> </table> 	Measurement field distance in m	Standard 21° × 16°	Option 32° × 24°	Option 8° × 6°	0,1	0.037 × 0.028	0.057 × 0.043	-	1	0.37 × 0.28	0.57 × 0.43	0.14 × 0.10	10	3.7 × 2,8	5.7 × 4,3	1.4 × 1.0
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Visual camera	Yes																
Measurement frequency	50 Hz PAL, 60 Hz NTSC																
Display	2.5" TFT-LCD																
Menu languages	German, English																
Display Mode	Thermal image, visual image, visual image fusioned with thermal image																
Color scale	False colors, grey scale																
Temperature display	°C or °F																
Image analysis	Spot temperature (4 selectable points), measurement areas with min/max/average, isotherm, histogram, line profile																
Measured value adjustment	Distance, ambient temperature, relative humidity																
Emissivity	Adjustable from 0.01 to 1.0																
Alarm function	Alarm signal when above or below an adjustable temperature																
Pilot light	Laser pointer, class 2																
Interfaces	USB 2.0, video output (PAL, NTSC)																
Data format	16 bit																
Image memory	Changeable 2 GB mini-SD card, internal memory																
Video	Recording of thermographic videos up to 30 min																
Voice recording	Recording time up to 60 s																
Software	PYROSOFT Compact for Windows®, optional PYROSOFT Professional																
Operating temperature	-10 °C to 60 °C																
Storage temperature	-20 °C to 60 °C																
Power supply	AC adapter 110/220 V AC, 50/60 Hz																
Battery	Changeable Li-ion camcorder battery, up to 4 h operating time																
Housing	Environmental protection IP 54																
Dimensions	154 mm (l) × 69 mm (w) × 45 mm (h)																
Weight	350 g																
Scope of delivery	Li-ion battery, charger, AC adapter, USB and video cable, user manual, carrying case, Mini-SD card 2 GB, software																
Optional accessories	Tripod adapter, rubber protection jacket, sunshield, infrared remote control high temperature filter (250 °C to 1200 °C)																

¹ Specification for black body and ambient temperature 25 °C. Specifications subject to change. March 2010.