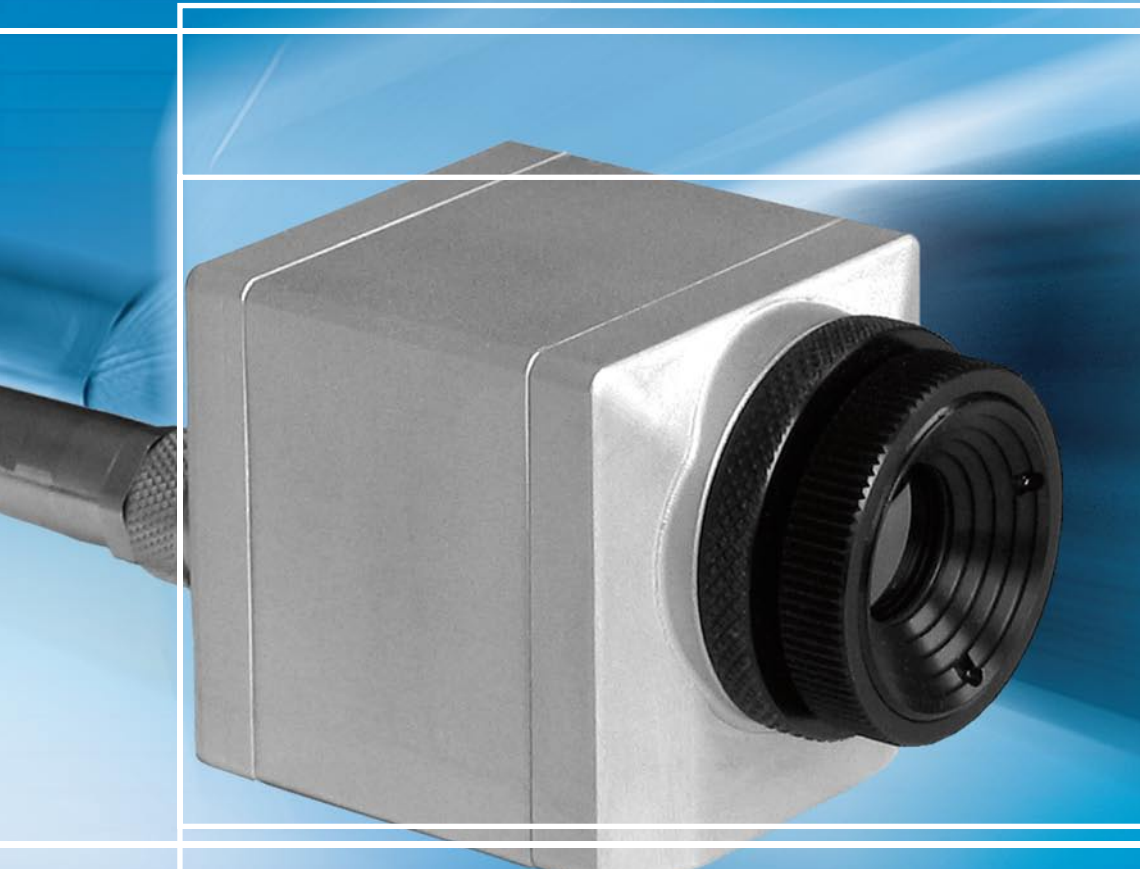




More Precision.

thermoIMAGER TIM
Compact Thermal Imager



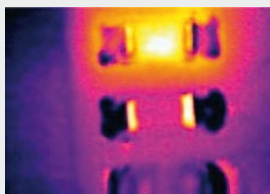


thermoIMAGER TIM

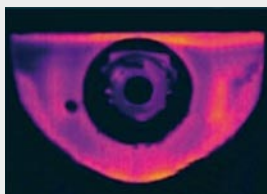
Very compact thermal imager with USB interface

- Measuring range from -20°C to 900°C
- Excellent thermal sensitivity of 0.08K
- Exchangeable lenses with 9°FOV and 31°FOV
- Real time video capture, with 100Hz frame rate and slow motion playback
- Power supply and operation via USB interface
- Extremely lightweight (250g) and rugged (IP65)
- Very compact 45x45x62mm
- Analogue input and output, trigger interface

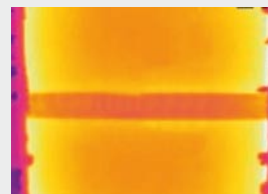
Applications



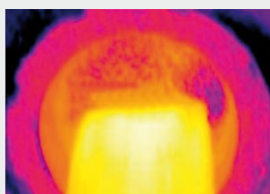
R&D electronic



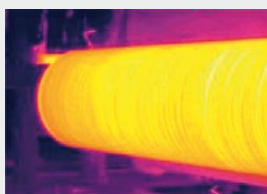
R&D mechanical components



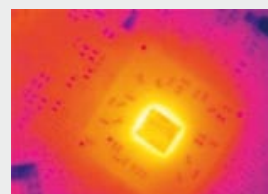
Production of solar panels



Process control extrusion



Process control calendering



R&D electronic devices

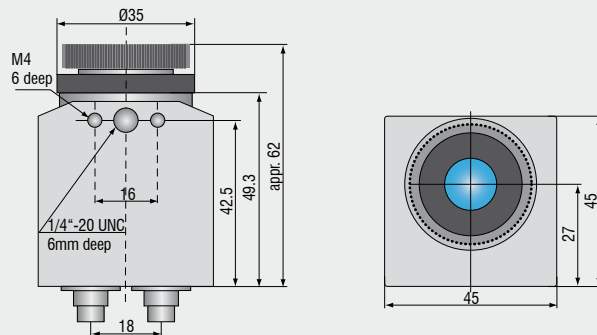
Model	thermoIMAGER TIM
Optical resolution	160x120 pixel
Temperature ranges	-20°C to 100°C / 0°C to 250°C / 250°C to 900°C (optional)
Spectral range	7.5 to 13µm
System accuracy	±2% or ±2°C
Resolution (Display)	0.1°C
Lenses	31° / f = 10mm (minimum distance 50mm); 9° / f = 36mm (minimum distance 200mm)
Emissivity	0.10 to 1.00 adjustable
Thermal Sensitivity	0.08K with 31° FOV/F = 0.7 0.3K with 9° FOV/F = 1.6
Detector	Focal Plane Array (FPA) - uncooled micro bolometer 35x35µm ²
Measurement modes	Flexible spot with crosshair marking, fixed measurement field with automatic display of maximum-, minimum- or average value
Colour palettes	Iron, rainbow, black-white, black-white inverted
Set up controls (via menu)	Mesurement modes, full automatic, manual, color palettes, emissivity, file management, date/time, °C/ °F, language
Outputs/digital	USB 2.0
Process interface (electrically isolated)	0-10 V output, 0-10 V input, trigger input
Cable length	1m (standard), 5m, 20m
Power supply	USB powered
Tripod mount	1/4-20 UNC
Environmental rating	IP 65
Ambient temperature	0°C to 50°C
Storage temperature	-40°C to 70°C
Relative humidity	20 to 80%, non-condensing
Vibration	2G, IEC 68-2-6
Shock	25G, IEC 68-2-29
Weight	250g; incl. lens

PC requirements: minimum 1.5GHz, 1GB RAM, Windows XP SP 2 or Vista

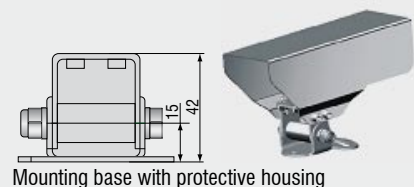
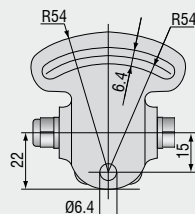
Scope of Supply

- ▶ TIM process camera including one selected lens
- ▶ Tripod mount
- ▶ Rugged transport case
- ▶ Manual
- ▶ USB cable
- ▶ Software: processing and analysing thermal images

Dimensions



Accessories



Mounting base with protective housing

Objective 31° x 23° wide angle; focal distance 10 mm; min distance 0.02m

Distance	m	0.02	0.1	0.3	0.5	1.2	2	4	6	10	30	100
HFOV	m	0.006	0.01	0.16	0.27	0.67	1.11	2.3	3.4	5.6	16.8	56
VFOV	m	0.004	0.04	0.12	0.21	0.50	0.84	1.7	2.5	4.2	12.6	42
IFOV	mm	0.03	0.30	1.00	1.70	4.20	7	14	21	35	105	350

Objective 9° x 7° wide angle; focal distance 35,5 mm; min distance 0.3m

Distance	m	0.02	0.1	0.3	0.5	1.2	2	4	6	10	30	100
HFOV	m	-	-	0.04	0.07	0.18	0.31	0.60	1	1.60	4.80	15.80
VFOV	m	-	-	0.03	0.05	0.14	0.23	0.50	0.70	1.20	3.60	11.90
IFOV	mm	-	-	0.30	0.50	1.20	2	4	6	10	30	99

FOV = Field of view; HFOV = Horizontal field of view; VFOV = Vertical field of view; IFOV = Indicated field of view

Non contact IR-temperature sensors at a glance

High-Performance infrared temperature sensor with double laser aiming

thermoMETER CTlaser -
Precise infrared sensors
with laser aiming
Measuring range -40 ... 1800°C



Compact infrared temperature sensor for OEM applications

thermoMETER CS/CX -
For OEM applications
Measuring range from -30 ... 900°C



Infrared temperature sensor for general purpose applications

thermoMETER CT -
The general purpose series
Measuring range -40 ... 1800°C



For handheld application, inspection and maintenance

thermoMETER Handhelds
Measuring range -35 ... 900°C

