

## optris® PI

Thermal Imager with USB 2.0 Interface  
for online applications



### FEATURES

- High accuracy within temperature ranges of -20°C up to 900°C
- Easy to use - small size
- Excellent thermal sensitivity (NETD) of 0,08 K
- Exchangeable lenses with 9° FOV and 31° FOV
- Real-time thermography with 100 Hz frame rate
- USB 2.0 interface, USB powered device
- 1 m, 5m or 20 m cable length
- Windows XP / Vista - Software PI Connect
- Analog input and output, trigger interface
- Extremely lightweight (250 g) and rugged (IP65)
- Size 45 mm x 45 mm x 62 mm

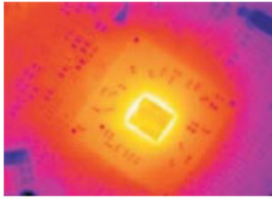
#### General specifications

Environmental rating	IP 65
Ambient temperature	0 - 50°C
Storage temperature	-40 - 70°C
Relative humidity	20 - 80 %, non condensing
Shock	25G, IEC 68-2-29
Vibration	2G, IEC 68-2-6
Weight	250 g, incl. Lens
<b>Electrical specifications</b>	
Output	USB 2.0
Power supply	USB powered
Process Interface (electrically isolated)	0-10 V output 0-10 V input trigger input
Tripod mount	1/4-20 UNC

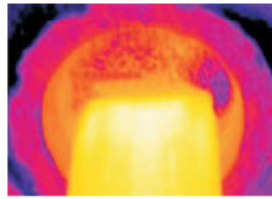
#### Measurement specifications

Temperature ranges	-20°C to 100°C 0°C to 250°C 150°C to 900°C (optional)
Detector	Focal Plane Array (FPA) uncooled micro bolometer 35 x 35 μm
Thermal Sensitivity (NETD)	0,08 K with 31° FOV/F=0.7 0,3 K with 9° FOV/F=1.6
Refresh rate	100 Hz
Spectral range	7,5 - 13 μm
Optical resolution	160 x 120 pixel
System accuracy	±2 % or ±2°C
Resolution (Display)	0,1°C
Lenses	31° / f = 10 mm 9° / f = 36 mm
Measurement Modes	Flexible spot with crosshair marking, fixed measurement field with automatic display of maximum-, minimum- or average value
Color Palettes	Iron, rainbow, black-white, black- white inverted
Set up controls (via menu)	Measurement modes, full automatic, manual, color palettes, emissivity, file management, date/time, °C/ °F, language
Emissivity	0,10 - 1,00 adjustable

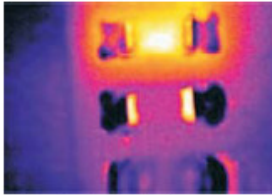
## Applications



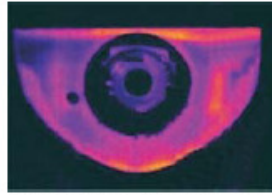
R&D electronic



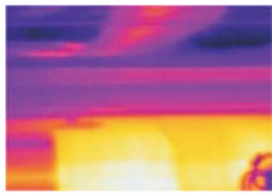
Process control extrusion



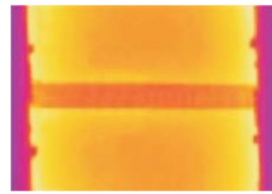
R&D electronic devices



R&D mechanical components

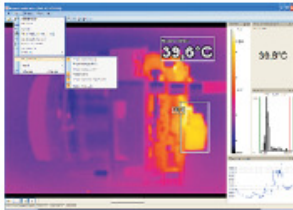


Process control calendaring



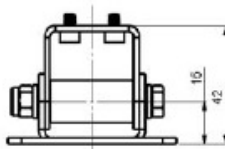
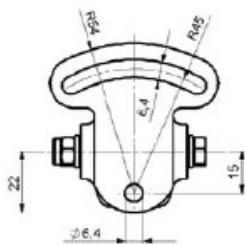
Production of solar panels

## Software PI Connect



- Display of the thermal image in real time (100 Hz) with recording function (video, snap shot)
- Complete set up of parameters and remote control of the camera
- Detailed analysis of fast thermodynamic processes

## Accessories

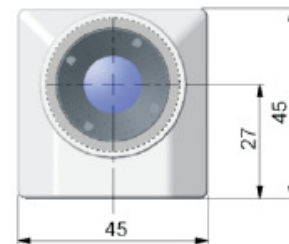
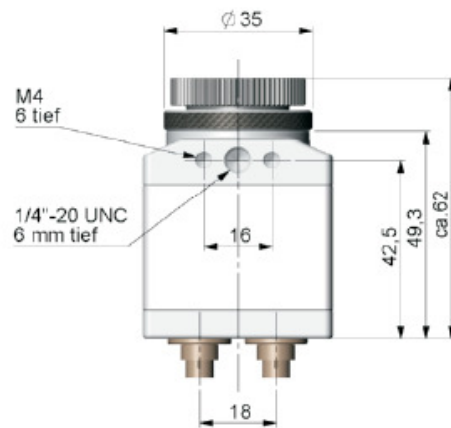


Mounting base with protective housing

## Standard Scope of Supply

- PI process camera incl. one selected lens
- Tripod mount
- Rugged transport case
- Manual
- USB cable
- Software PI Connect: processing and analyzing thermal images

## Dimensions



## KA Sensors Ltd

Unit 14A, The Old Malthouse, Springfield Road, Grantham, NG31 7BG UK  
 T: +44(0)1476 568057 F: +44(0)1476 561495 E: sales@kasensors.co.uk