

# PYROVIEW M380L portable

Portable infrared camera for general application

**-20 °C to 550 °C**



# PYROVIEW M380L portable

## Portable infrared camera



### Overview

- Temperature measurements between  $-20\text{ }^{\circ}\text{C}$  to  $550\text{ }^{\circ}\text{C}$
- Spectral range  $8\text{ }\mu\text{m}$  to  $14\text{ }\mu\text{m}$
- Measurement frequency 25 Hz
- 3.5" LCD touch display
- Uncooled microbolometer array ( $384 \times 288$  pixels)
- Visual camera ( $1920 \times 1080$  pixels)
- Integrated laser pointer and target illumination
- Micro USB interface

### Description and application

The PYROVIEW M380L portable is a thermal imaging camera for non-contact temperature measurement up to  $550\text{ }^{\circ}\text{C}$ . It is used for applications for example, in substations, photovoltaics, metallurgy, buildings, electronics, telecommunications or data centers.

The device PYROVIEW M380L portable has a resolution of  $384 \times 288$  pixels and a frame rate of 25 Hz. In addition, the infrared camera has an integrated visual camera. The display can thus display a thermal image, a visual image or an overlay of both image types.

The camera is operated via a high-resolution touchscreen color display ( $640 \times 480$  pixels) and control buttons. Via a simple, intuitively operated menu, essential parameters of the camera can be set. Many useful functions, such as mid-point temperature, maximum temperature or measurement lines can be displayed. The camera allows the radiometric recording of still images. Videos can be recorded in MPEG format. It is also possible to record voice comments via Bluetooth headset. A USB port is used to transfer data to a PC so that the stored images can be easily analyzed with the software PYROSOFT Compact or PYROSOFT Professional.

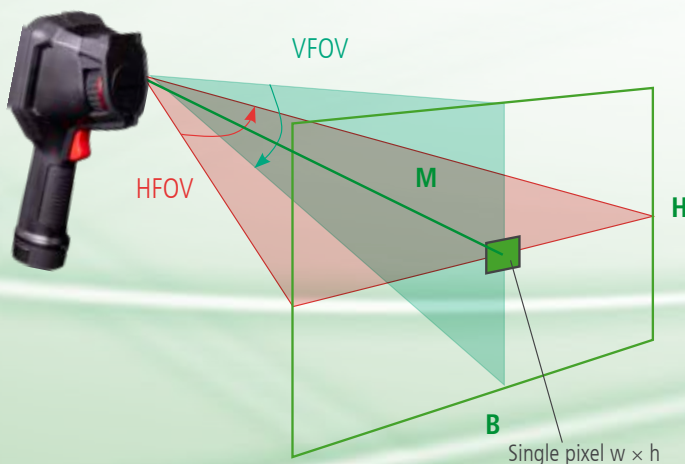
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## Portable infrared camera

Technical data	
Part number	2101A10401
Spectral range	8 $\mu\text{m}$ to 14 $\mu\text{m}$
Measuring temperature ranges	-20 $^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$ , 100 $^{\circ}\text{C}$ to 550 $^{\circ}\text{C}$ (switchable)
NETD <sup>1,2</sup>	< 0.1 K (30 $^{\circ}\text{C}$ , 25 Hz)
Aperture angle	37° × 28°, optics with manual focus
Sensor	uncooled microbolometer array (384 × 288 pixels)
Measurement uncertainty <sup>2</sup>	2 K (Objekttemperatur < 100 $^{\circ}\text{C}$ ) or 2 % of measured value
Measurement frequency	25 Hz
Response time	80 ms
Interface	Micro-USB
Display	3.5" LCD touch display, resolution 640 × 480 pixels, different color bar, thermal/visual image/fusion image, display of: maximum temperature, minimum temperature, center temperature, point/line/form thermometry
Optical camera	1920 × 1080 pixels
Image storage	integrated memory (64 GB)
Image storage	radiometric
Video storage	not radiometric, MPEG
Digital zoom	1x, 2x, 4x
Sighting options	integrated laser pointer, integrated target lighting, video camera
Further functions	Bluetooth (voice memo via headset)
Battery pack	Lithium ion battery, rechargeable and exchangeable
Charger	100-240 V AC
Operating time	up to 4 hours continuous operation
Weight	0.7 kg
Housing	plastic housing (protection class IP54), dimensions: 244 mm × 100 mm × 104 mm [H × W × D]
Operating temperature of the camera	-10 $^{\circ}\text{C}$ to 50 $^{\circ}\text{C}$
Storage conditions	-20 $^{\circ}\text{C}$ to 70 $^{\circ}\text{C}$ , max. 95 % rel. humidity
Software	control and imaging software PYROSOFT Compact for Windows®, optional PYROSOFT Professional
Scope of delivery	infrared camera PYROVIEW M380L portable, calibration certificate, user manual, software PYROSOFT Compact, USB-interface cable, charging station, removeable battery, transport case, power adapter

<sup>1</sup> Noise equivalent temperature difference. <sup>2</sup> Specification for black body radiator and ambient temperature 30  $^{\circ}\text{C}$ .

### Optik



HFOV × VFOV	M [m]	W [m]	H [m]	w [mm]	h [mm]
IFOV					
37° × 28°	1	0.68	0.51	2	2
	3	2.04	1.53	5	5
1.7 mrad	10	6.79	5.09	18	18

Values are valid for internally saved images and sequences as well as for the touch display at digital zoom 1x.

HFOV ... Horizontal Field Of View

VFOV ... Vertical Field Of View

IFOV ... Instantaneous Field Of View

M ... Measurement distance

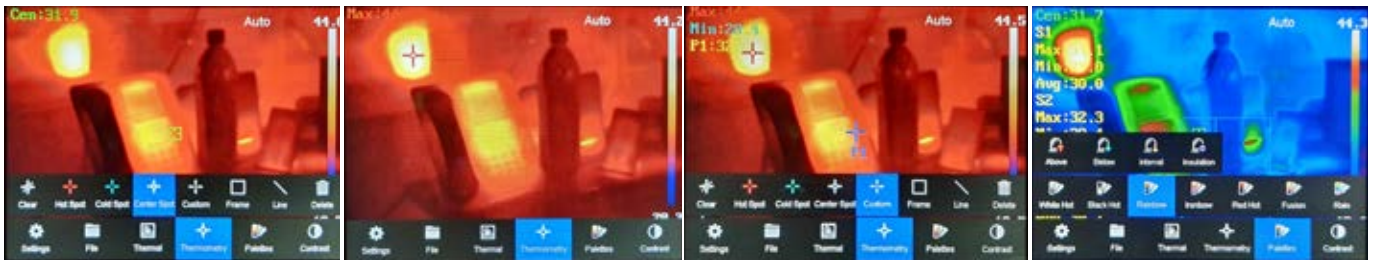
B ... Image width H ... Image height

b ... Pixel width h ... Pixel height

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### Displays (examples)



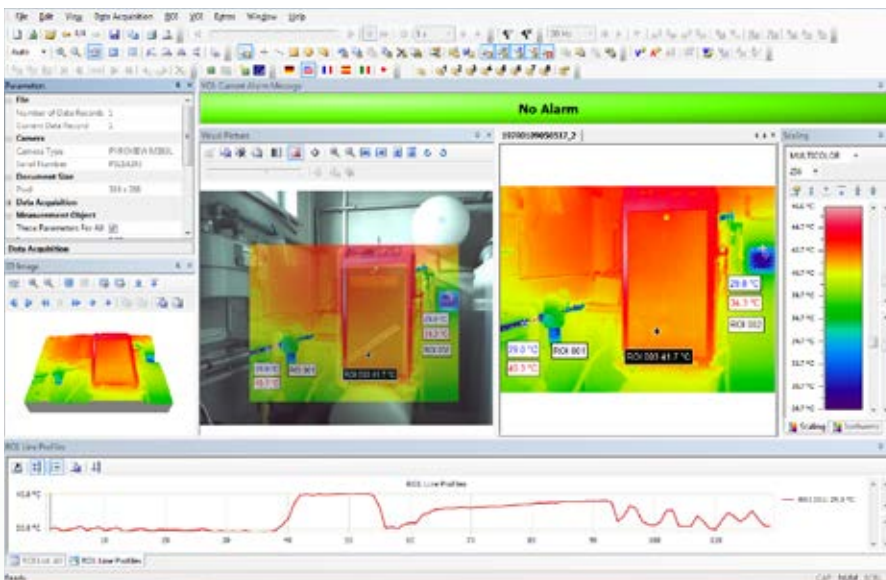
Standard display  
(center temperature)

Standard display  
(hotspot temperature)

Standard display  
(customized temperature)

Change of color bar

### Software: PYROSOFT Compact and PYROSOFT Professional



PYROSOFT Compact and PYROSOFT Professional are two universal and multilingual software versions for Windows® (from version XP) for the display, analysis, evaluation and documentation of thermography data. PYROSOFT Compact is a free version that is delivered with every DIAS infrared camera.

Functions of PYROSOFT Compact are for example:

- Open saved files and sequences
- Bitmap export (BMP, JPG, PNG)
- Video export (AVI, WMV)
- Select color bars and scaling
- ROI functions (Regions Of Interest)
- Integrated report function

PYROSOFT Professional enables additionally the following functions:

- Multi document structure for multiple documents or cameras
- Extended display functions, e.g. isotherms and 3D display with auto rotation
- Extended analysis functions, e.g. histogram and spot calculation
- VOI functions (Values Of Interest) with alarm and trend charts
- Multi reports for album files from multiple documents