

**Thermal Imaging
Camera OMC Series
-20 °C up to 900 °C**



Precise temperature measurement of areas

The robust thermal imager OMC is an extremely compact infrared camera in a M36 stainless steel housing weighing just 200 g. Several clever functions allow for area temperature measurement between -20 °C and 900 °C in different manufacturing processes.

The system offers one analog and one digital output. Through the interface it is possible to create and define separately up to 9 measuring fields, for further processing.

An automatic spot finder is incorporated into the camera. This makes the temperature measurement of moving objects possible, without a new alignment of the OMC. All models are equipped with motorized focus, which - combined with the OMC software – allows for precise focusing in the distance.

With an image processing frequency of up to 80 Hz, the system is fit for use also in high-speed thermal processes. Optics with different angles of views are available to suit specific application needs.

These thermal imaging cameras have been designed for control and monitoring tasks in different industrial sectors:

- steel and rolling mills
- furnace construction
- ceramics
- soldering, sintering, hardening
- metal sector
- automotive
- electronics manufacturing
- quality control

Highlights at a glance

- stainless steel housing M36
- incorporated electronics
- motorized focus

Temperature ranges:

- -20 °C up to 100 °C
- 0 °C up to 250 °C
- 150 up to 900 °C

Electrical connection:

- 5 - 30 V DC
- 0 - 10 V, 0/4 - 20 mA output signal
- USB interface
- alarm output
- trigger input

Technical Data:

- frame rate up to 80 Hz
- objects being measured as small as 0,3 mm
- accuracy from +/- 2% (+/- 2 °C)
- optical resolution max 382 x 288 px
- ambient temperature up to 50 °C

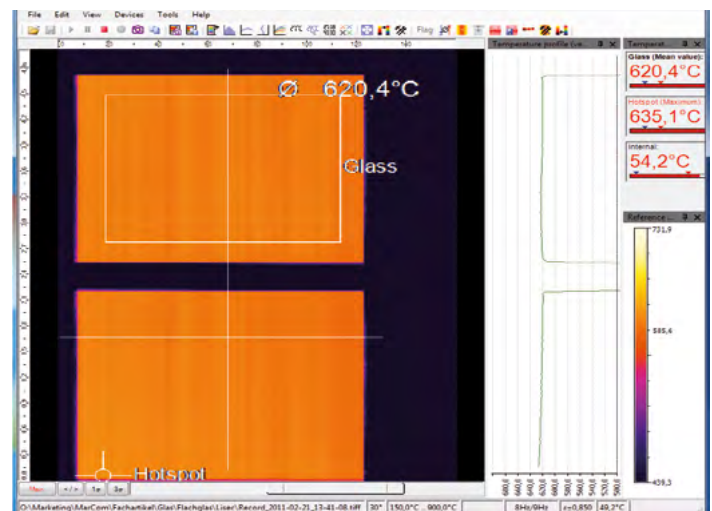
An extensive range of accessories rounds off this product line and allows adaptation to fit different operating conditions.

Software

The following functions are possible via software:

- real-time infrared imaging
- temperature display and evaluation
- focus adjustment
- recording of video sequences or individual images
- analysis and processing of image information
- configuration of digital / analog input and outputs
- automatic snapshots and alarm thresholds
- definition of measurement areas, temperature ranges
- coldspot and hotspot detection, frame rate, software layout.

The software runs under Windows. The user guidance system is multilingual and largely self-explanatory.



Thermal Imaging Camera Type overview OMC series

The thermal imaging cameras of the OMC series for temperature measurement of large areas have been designed for use in several applications and are available in different versions.

Advantages of the OMC series

- temperature measurement of large areas
- setting of the temperature range
- robust, compact stainless steel housing (M36)
- different fields of view
- easy configuration and evaluation via Windows software
- setting of inputs and outputs
- autonomous operation possible (OMC XI80).



Type overview

OMC XI80		optical resolution 80 x 80 px					
	Measurement distance [m]	0,2	0,5	1	5	10	30
Type	Angle of view	Measurement area horizontal x vertical (m)					
OMC XI80 F13	12° x 12°	0,043 x 0,043	0,11 x 0,11	0,21 x 0,21	1,6 x 1,2	2,1 x 2,1	6,4 x 6,4
OMC XI80 F05	30° x 30°	0,11 x 0,11	0,28 x 0,28	0,56 x 0,56	2,6 x 1,9	5,6 x 5,6	16,7 x 16,7
OMC XI80 F03	55° x 55°	0,218 x 0,218	0,54 x 0,54	1,07 x 1,07	4,9 x 3,5	10,7 x 10,7	32 x 32
OMC XI80 F02	80° x 80°	0,343 x 0,343	0,88 x 0,88	1,68 x 1,68	8,4 x 5,1	16,8 x 16,8	50,3 x 50,3

OMC XI400		optical resolution 382 x 288 px					
	Measurement distance [m]	0,2	0,5	1	5	10	30
Type	Angle of view	Measurement area horizontal x vertical (m)					
OMC XI400 F20	18° x 14°	0,068 x 0,05	0,17 x 0,076	0,33 x 0,25	1,6 x 1,2	3,3 x 2,5	9,8 x 7,4
OMC XI400 F13	29° x 22°	0,1 x 0,078	0,26 x 0,2	0,53 x 0,36	2,6 x 1,9	5,3 x 3,9	15,9 x 11,8
OMC XI400 F08	53° x 38°	0,21 x 0,15	0,51 x 0,35	1,01 x 0,7	4,9 x 3,5	10 x 6,9	29,9 x 20,8
OMC XI400 F06	80° x 54°	0,3 x 0,2	0,78 x 0,51	1,57 x 1,01	8,4 x 5,1	15,7 x 10,2	47,3 x 30,5

Autonomous operation (OMC XI80)

For process control or quality recording purposes, the OMC XI80 thermal imager can be set to operate in autonomous mode, without connection to the software. This allows for permanent monitoring of manufacturing processes or areas, with no additional PC. For this reason this camera is the proper solution also for outdoor applications.



Thermal Imaging Camera OMC Series

Accessories for OMC

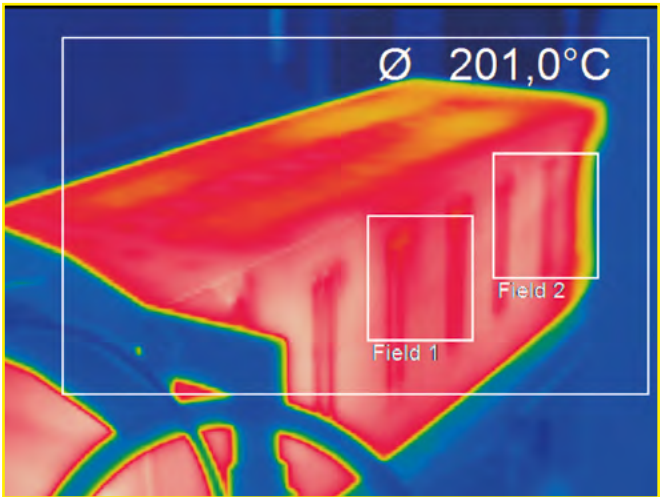
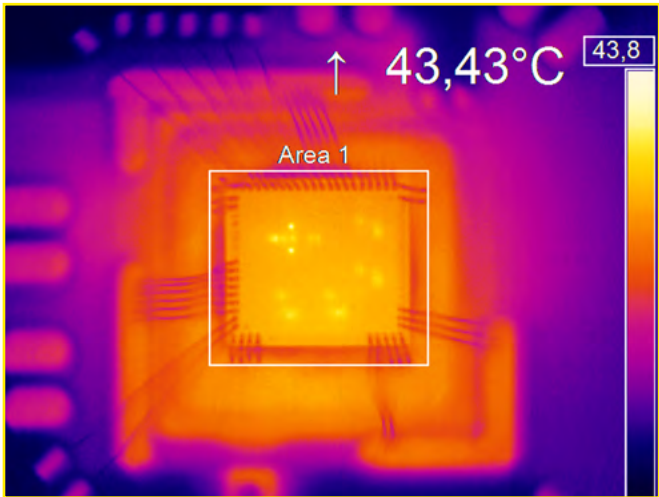
Description		
Mounting bracket - 2 axes		
Air purge		
Outdoor protective housing		
Cooling jacket		
Process Interface converter		

A USB cable and input/output connection cables are available in different versions and in 1 to 20 m length.

Additional accessories on request.

Applications for Proxitron infrared cameras are for example:

- object monitoring in presses
- object temperature in furnaces
- fault location in electronics
- object detection
- quality control
- research and development
- ceramics production
- metal forming
- plastics processing



Further Proxitron thermal imaging cameras are available for different applications.

Please let us know your requirements. We will be pleased to advise you.