

DIAS Infrared GmbH

Your Manufacturer and Partner for Industrial Infrared Systems

- Thermal Imaging Cameras
- Infrared Line Cameras
- Infrared Detectors
- Measurement and Calibration Equipment



Fixed Infrared Cameras

Our fixed infrared cameras PYROVIEW provide non-contact measurement of temperature distributions for industrial processes:

- Temperature measurement from -20 °C to 1250 °C , optional up to 2500 °C
- Various spectral ranges available, e.g. $8\text{ }\mu\text{m}$ to $14\text{ }\mu\text{m}$, $4.8\text{ }\mu\text{m}$ to $5.2\text{ }\mu\text{m}$, $3\text{ }\mu\text{m}$ to $5\text{ }\mu\text{m}$ and $0.8\text{ }\mu\text{m}$ to $1.1\text{ }\mu\text{m}$
- Uncooled microbolometer arrays or semiconductor 2-D arrays
- Models with 320×240 , 384×288 , and 640×480 pixels
- Robust housing IP 65 or compact housing IP 54
- Measurement frequency 25 to 100 frames per second
- Real-time data acquisition via Fast Ethernet, CameraLink or fibre optics
- Alarm and threshold monitoring



Infrared Line Cameras



The infrared line cameras PYROLINE provide fast non-contact measurement of temperature profiles:

- Temperature measurements from 0 °C to 1300 °C
- Several spectral ranges available, e.g. $8\text{ }\mu\text{m}$ to $14\text{ }\mu\text{m}$, $4.8\text{ }\mu\text{m}$ to $5.2\text{ }\mu\text{m}$, $3\text{ }\mu\text{m}$ to $5\text{ }\mu\text{m}$ and $1.4\text{ }\mu\text{m}$ to $1.8\text{ }\mu\text{m}$
- Uncooled infrared linear arrays (128 or 256 elements)
- Robust housing for industrial environments (IP65)
- Measurement frequency 256 lines per second, optional 512 lines per second
- Real-time data acquisition via Fast Ethernet, CameraLink or fibre optics

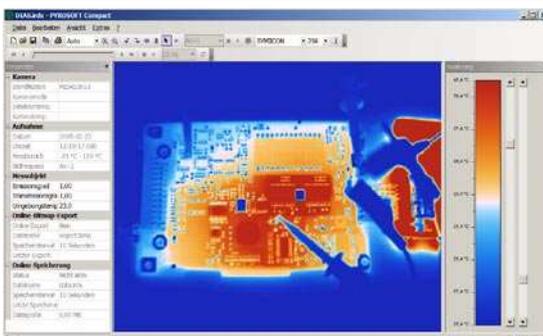
System Solutions & Applications

We provide our customers with complete system solutions based on our infrared cameras. Examples of these are given below:

- Fire surveillance system PYROVIEW/PYROSOFT WBFDS for waste bunkers and storage areas
- Infrared imaging system for use during the manufacture of gypsum
- Temperature measurement systems PYROINC for combustion chambers
- Infrared cameras PYROLINE/PYROVIEW for glass industry
- High-speed infrared line camera system PYROLINE HZK 256N for temperature measurements of brake disks and weld seams



Software



The powerful online software PYROSOFT for Windows[®] allows you to control the camera and view, manipulate, record, and store the measured data:

- Real-time data acquisition and storage
- Monitoring for defined zones of thermal images and threshold monitoring
- Trend analysis
- Data export (text, bitmap, video)
- Support for process interfaces, e.g. Profibus

Portable Infrared Camera

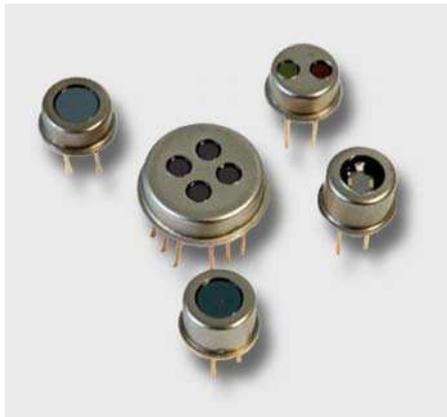
The MIDAS thermal imaging camera is an extremely light-weight, high-performance hand-held IR camera offering capabilities normally found in models costing much more:

- Portable infrared camera with 320 × 240 pixels
- Switchable temperature measurement ranges: -20 °C to 120 °C and 0 °C to 500 °C (optional 100 °C to 900 °C)
- Spectral range 8 μm to 14 μm
- Touch-screen TFT LCD and electronic viewfinder
- USB 2.0 interface for off-line image transfer
- Digital on-line image transfer to PC via USB 2.0 interface

This radiometric camera is ergonomically designed for comfortable one-handed point-and-shoot operation using a single button located on the top of the camera.



Infrared Detectors



Our pyroelectric single and multi-element detectors are designed for use in

- Gas analysis
- Spectroscopy
- Pyrometry
- Security applications

The wide range of available sensor designs enables us to provide customised solutions for small and large quantities.

Very high values of specific detectivity D^* are achieved by using modern ion beam etching technology.

Blackbody Radiators

DIAS Infrared GmbH develops and manufactures blackbody radiators for customer-specific applications. Different temperature ranges and the dimensions of the radiating area are available. The following overview describes a few selected models:

- Calibration radiator PS 400/2, radiating area 30 mm, temperature range 50 °C to 400 °C
- Calibration radiator PS 500, radiating area 60 mm, temperature range 50 °C to 500 °C



Calibration Service



We have our own calibration laboratory, which is equipped with blackbody radiators. We are able to offer the services of this laboratory to our customers for the calibration of measurement equipment and blackbody radiators:

- Equipment tested: radiation pyrometers, infrared cameras, and blackbody radiators
- Temperature range: 0 °C to 1600 °C
- Method of calibration: according to QS DIN EN ISO 9000 ff standards



- **R & D, manufacturing, sales, and service from one source**
- **German quality and reliability**
- **Two years warranty**
- **Certified to DIN EN ISO 9001:2000 for many years**

DIAS Infrared GmbH is a leader in the field of infrared technology. Our key strengths are professionalism, reliability and flexibility. Our dedicated experts are able to offer you the benefits of 25 years of practical and technical experience in infrared technology. We specialise in the development, manufacture and support of industrial systems. These include:

- Non-contact temperature measurements
- Thermal imaging
- Security systems and technology
- Gas analysis
- Measurement and calibration equipment

Our company offers a wide selection of products based on computerised problem analysis. We develop and manufacture equipment ranging from sensors, electronic, optional, and precision mechanical components to complete infrared systems with customised software:

- **Products**
 - Infrared line and thermal imaging cameras
 - Infrared sensors
 - Blackbody radiators
- **Services**
 - Research and development
 - Consultancy and measurements
 - Calibration Services

Our key speciality areas are infrared cameras, and systems which incorporate infrared cameras. These products are supported by an extensive and expanding worldwide distribution network. Our technical experts would be pleased to give you advice, and to conduct on-site field trials.

Our close collaboration with the Technical University in Dresden ensures that we have access to the most up-to-date infrared technology available.

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