

DIAS Infrared Corp.

Your Professional Manufacturer and Partner for Non-contact Temperature Measurement Systems





DIAS Infrared GmbH has established itself as a leading supplier in the field of infrared technology. A particular focus being the non-contact temperature measurement in industrial processes. Our highly motivated, experienced and qualified employees develop, manufacture and market our innovative products:

Pyrometers PYROSPOT for non-contact temperature measurement

- Several temperature ranges from -40 °C to 3000 °C
- Adjusted spectral ranges for different applications
- Fixed, vario and fibre cable optics
- Standard outputs for industry (analog and digital)
- Robust housings with easy connection possibilities
- Convenient evaluation and parameterizing software PYROSOFT Spot
- Wide range of accessories
- Fixed and portable devices

Line cameras PYROLINE for the detection of temperature profiles

- Temperature measurements from 0 °C to 3000 °C
- Several spectral ranges for different applications
- Uncooled infrared line arrays (128, 256 or 512 pixels)
- Compact housing IP54 or industry protection housing IP65
- High measurement frequency of 256 lines per second, optional up to 2000 lines per second
- Real-time data transmission via Fast Ethernet

Infrared cameras PYROVIEW for the measurement of temperature distributions

- Temperature measurements from -20 °C to 3000 °C
- Adjusted spectral ranges for different applications
- Uncooled microbolometer or semiconductor 2D arrays
- Models with 320 \times 240, 320 \times 256, 384 \times 288, 480 \times 360, 512 \times 384 , 640 \times 480 and 768 \times 576 pixels
- Compact housing IP54 or industry protection housing IP65
- Typical measurement frequency 50 frames per second
- Real-time image transmission via Fast or Gigabit Ethernet, GigE Vision® compatible
- Alarm- and treshold monitoring, stand-alone operation
- Fixed and portable cameras

Software PYROSOFT for display and processing of measurement data

- Camera control and monitoring
- Recording, visualization, processing and storage of the measured data
- Real-time data storage
- Definition of zones and alarm value monitoring
- Analysis of trends
- Data export (text, bitmap, video)
- Support of process interfaces, such as Profibus

Black bodies PYROTHERM for measurement and calibration tasks

Black body calibration sources from −15 °C to 1500 °C

Pyroelectric infrared detectors PYROSENS

- Pyroelectric single and multi element detectors
- Pyroelectric linear arrays
- For non-contact temperature measurements, gas analysis, spectroscopy and security applications

In addition we offer the following **services**:

- Calibration services
- Measurement services
- R & D services



The DIAS benefit:

Research, development,

sales and service from

one source

DIAS Intravent C.

PYRO**SPOT**Pyrometers
fixed & portable

PYROLINE Infrared line cameras





PYRO**VIEW**Infrared
cameras
fixed & portable

PYRO**SOFT**Thermography
Software





PYRO**THERM**Calibration
Sources

PYRO**SENS**Sensors &
Arrays





Application Areas and System Solutions



The **application areas** of our pyrometers, infrared cameras and detectors are very multi-purpose. A special focus being the non-contact temperature measurement for process control, process engineering, process automation and quality control in industry. Our products can be used advantageously in a variety of other applications. Examples include:

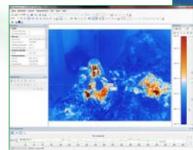
- Fire detection
- Metal industry
- Glass industry
- Semiconductor and solar industry
- Plastics manufacturing and working up
- Traffic supervision
- Combustion chamber monitoring
- Human and veterinary medicine
- Research and development





In addition a large number of standard products, we also develop and manufacture custom application specific **system solutions** with adjusted hard- and software. Examples are:

- Infrared fire detection systems PYROVIEW FDS
- Infrared temperature measurement systems PYROINC for combustion chambers
- Line camera systems PYROLINE WBS for plasterboards
- Infrared temperature measurement systems for traffic supervision
- Infrared temperature measurement systems for glass industry
- Non-contact iron stream temperature measurement
- High temperature measurement systems for forges, continuous casting machines and inductive hardening
- Testing of materials with active thermography





Temperature and spectral ranges

The measurement should be made at short wavelengths to minimize the temperature measurement error as a result from not precisely known emissivity. According to the material of the measurement object, infrared cameras and pyrometers can be chosen in the following typical temperature and spectral ranges:

Materials	Temperature range	Spectral range
Non-metals, coated metals	−40 °C to 1000 °C	8 μm to 14 μm
Glass surfaces	50 °C to 2500 °C	4.8 μm to 5.2 μm
Measurements through flames and combustion gases	100 °C to 2500 °C	3.9 μm
Metals, ceramics, graphite	200 °C to 2500 °C	1.5 μm to 1.8 μm
Metals, ceramics, glass melts	500 °C to 3000 °C	0.8 μm to 1.1 μm





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Our new company building in Dresden, Germany

Prof. Dr.-Ing. Günter Hofmann (founder of DIAS Infrared GmbH, longstanding CEO) and Phil Gregor (President DIAS Infrared Corp.)



Non-contact Temperature Measurement: Safe and Precise

Based in Dresden/Germany, DIAS Infrared GmbH develops and manufactures high-quality infrared cameras, infrared line cameras, pyrometers, black bodies and infrared detectors for industrial temperature measurements. The own software specifically designed for the display and processing of the measurement data is included as well. In addition, a large part of our orders are individual and application specific system solutions and services.

The owner-managed DIAS Infrared GmbH that was founded in 1992 employs over 50 high qualified colleagues of which almost the half act in the research and development department. DIAS Infrared GmbH develops and manufatures all products with high quality standards at the German headquarters. Our products have proven themselves over many years with satisfied customers.

DIAS Infrared Corp. is open with a principal office in Massachusetts. The company, formed August 1, 2012, is a wholly owned subsidiary of DIAS Infrared GmbH. The subsidiary and new office is designed to better serve our North American customers with expert local sales and application support services. Recent growth in DIAS industrial noncontact temperature measurement systems has made now the right time to concentrate efforts in North America through creation of the subsidiary. DIAS Infrared Corp. now serves as the focal point to manage all North American operations for DIAS IR cameras, pyrometers, and system solutions.

For general inquiries within North America contact Phil Gregor: Call 774-261-8699, or e-mail sales@dias-infrared.com

Advantages of non-contact temperature measurement:

- Measurements on objects which are difficult to reach, moving, aggressive or very hot
- No influence on the temperature of the measurement object, reactionless measurement
- No material wear on the measurement object, non-destructive measurement
- Persistance of the measuring point, no abrasion on the measurement device

Why should you use non-contact temperature measuring technology made by DIAS Infrared?

- Worldwide unique product range of fixed non-contact temperature measuring technology from simple pyrometer to complex thermography complete solution
- Individual and professional advice, service and installation
- Development, manufacturing, sales and service from one source
- Qualified staff with longtime experience in the field of infrared measuring technology



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