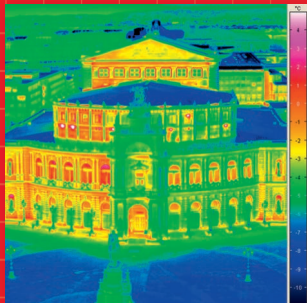


A Passion for Innovation

Your Specialist for Thermographic Measurement
Systems introduces itself





Managing partners:
left Dr.-Ing. Matthias Heinze (Head
of the Infrared Sensor Division),
right Dr.-Ing. Matthias Krauß
(Head of the Infrared
Measurement Division)

Dear Customers and Business Partners,

This brochure was designed to deliver you insight into our company InfraTec.

Our infrared technology belongs to the most recent ones world-wide currently available. We are your competent service provider within our two business areas infrared sensors and measurement technology. Our customers from around the world are supplied with our company's developed and manufactured detectors and cameras as well as in cooperation of the well-known camera manufacturer Jenoptik. We are specialised in automation solutions and integrated infrared technology in complex industrial processes.

Consulting and service are our top priority! We develop and manufacture infrared detectors and thermographic systems according to your demands. Furthermore, we carry out special measurements, research on behalf of you and share our knowledge in seminars.

The key of InfraTecs' success comes from our long experience. Since our foundation in 1991, our company has been developed into an internationally well-known and greatly demanded high-tech

expert. We are independent and run by our company's founders and owners. With our subsidiaries in Great Britain and in the USA as well as with more than 40 international distribution partners, we operate globally and are, therefore, close to our customers.

In the financial year of 2014 a turnover of 25.2 million Euro has been generated by our 200 employees. This success is also due to you, our partners and customers!

However, see it for yourself! Come to know InfraTec and experience the high quality of our products and our service. Enjoy reading!
Yours sincerely,

Dr.-Ing. Matthias Krauß
Managing Director

Our two most excellent Areas

We are leading specialists for infrared sensors and measurement technology European-wide. In both of our business areas sensor components and camera systems are developed, manufactured and finally distributed.

High-precision Sensors for your Needs

Most diverse infrared sensor components are manufactured according to your individual demands in a clean room measuring 1,000 m². Here, infrared detectors emerge as prototypes which are further produced in small series, but also in high quantities. On the basis of 50 standard types, almost every customer request can be realised. World's leading manufacturer integrate our infrared detectors in their systems. These come into operation in respect of flame sensor technology as well as in the area of gas analysis, spectroscopy and non-contact temperature measurement.

Infrared Measurement Technology for all Applications

Our business area infrared measurement technology is your reliable partner in all application fields of thermography. Providing more than 50 different camera systems, from uncooled mobile cameras up to high-end thermographic systems, we realise solutions for each thermographic measurement task.

You will be surprised by our Product's Variety:

- Our smallest infrared cameras are handy like mobiles but yet efficient
- Our professional cameras are your ideal hand tools for most diverse applications
- Our high-end systems satisfy your high demands in research and development
- Our infrared images enable you to recognise automobiles in a distance of seven kilometres even at night

Important Stations of Company History

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|---|---|
| <p>1991 Foundation of InfraTec; IR multicolor detectors are already available on demand</p> <p>1992 Development and successive distribution of the NIR high temperature thermographic camera HotCAM</p> <p>1993 Market launch of the first mobile VARIOSCAN based on a scanning system with a resolution of (300 × 200) IR pixels</p> <p>1994 First completed assembly line for pyroelectronic detectors</p> <p>1995 Global distribution of our own automation solutions</p> <p>1996 First thermographic automation solution WASTE-SCAN for early fire detection</p> <p>1997 Introduction of the second generation of VARIOSCAN; InfraTec exclusively represents JENOPTIK thermographic systems</p> <p>1998 First mobile FPA camera VarioTHERM™; Introduction of the thermographic software family IRBIS®</p> <p>1999 Introduction of the uncooled industrial camera series PIR uc</p> <p>2000 First system for automatised object monitoring IROD; Introduction of the third generation of high resolution scanner systems with the product series VARIOSCAN high resolution</p> <p>2001 InfraTec introduces the worldwide first radiometric FPA thermographic system M700 with a detector array of (640 × 480) IR pixels</p> <p>2002 First IR rotation test rig with high speed camera technology</p> <p>2003 Market launch of the camera series VarioCAM® – the worldwide first mobile microbolometer camera with (640 × 480) IR pixels</p> <p>2004 VarioCAM® is extended by the compact industrial version VarioCAM® head</p> | <p>2005 Market launch of the high-end camera series ImagerIR® by InfraTec, foundation of a subsidiary in Great Britain</p> <p>2006 New active thermographic system PV-LIT for photovoltaics applications</p> <p>2007 Market launch of the worldwide first mobile microbolometer camera with Megapixel resolution, namely VarioCAM® high resolution; Foundation of a subsidiary in the USA</p> <p>2008 Introduction of the newly developed thermographic software family IRBIS® 3; Supply of an infrared test system for non-destructive weld seam testing to the Volkswagen Group</p> <p>2009 Introduction of the second generation of high-end camera series ImagerIR®; Supply of the worldwide first fully automated infrared system for spot weld testing to the Daimler AG</p> <p>2010 InfraTec's MEMS based Tunable Fabry-Pérot Microspectrometer for Infrared Absorption Spectroscopy wins PRISM AWARD in the category "Detectors, Sensing and Imaging Systems"</p> <p>2011 InfraTec celebrated its 20th anniversary on 1st July together with 260 business partners, customers and employees</p> <p>2012 Product launch of thermographic cameras VarioCAM® High Definition and ImagerIR® 9300 with Megapixel resolution</p> <p>2013 The high-speed thermal imager ImagerIR® 8300 high performance allows frame rates of 350 Hz for the first time</p> <p>2014 Presentation of a new generation of detectors with integrated tunable Fabry-Pérot filter for the first time, with integrated control implemented by an ASIC and an EPROM; The thermal imaging cameras with super zoom lens and HD resolution, ImagerIR® 8300/9300 Z are placed on the market</p> |
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Consulting is our daily Business

We are your expert partner in the complex field of thermography. Whether you are in need of a mobile infrared camera or want to monitor manufacturing processes – our experienced engineers help you with words and deeds.

You want more than just a Thermographic Camera

Resolving your measurement tasks is in our centre of attention. Coming from a background of more than 20 years of experience in infrared technology, on our expert knowledge we recommend the optimal system for your application and provide possible scenarios about alternative camera features. Our company's professional software for analysing and documenting your customer-specific measurement results is developed at our headquarters in Dresden, Germany. On purchasing one of our products, customers are individually supported by our competent personnel with maintenance, service and updates.

The very best Solution for your Measurement Task

We offer a wide range of products covering more than 50 camera systems for all fields of applications in infrared thermography. Together we will clarify which of our numerous systems – in combination with a large variety of accessories – meet your individual demand.

■ **Research and Development**

You are able to save time and money by optimising constructive deficiencies of components and assemblies thermally while prototypes are being developed.

■ **Process Optimisation**

You are able to monitor manufacturing processes automatically in a non-destructive and contact-less manner.

■ **Maintenance and Inspection of Plants**

You are able to reduce risk of failures and detect malfunctions at an early stage.

■ **Building Thermography**

You are able to check heat insulation, detect structural faults, locate leaks and determine the position of architectural and structural elements.

■ **Medicine**

You are able to utilise thermography as non-invasive, entirely passive process in order to make precise diagnoses.

■ **Object Monitoring**

You are able to secure buildings, industrial facilities and open spaces with the help of our thermographic systems even from large distances.

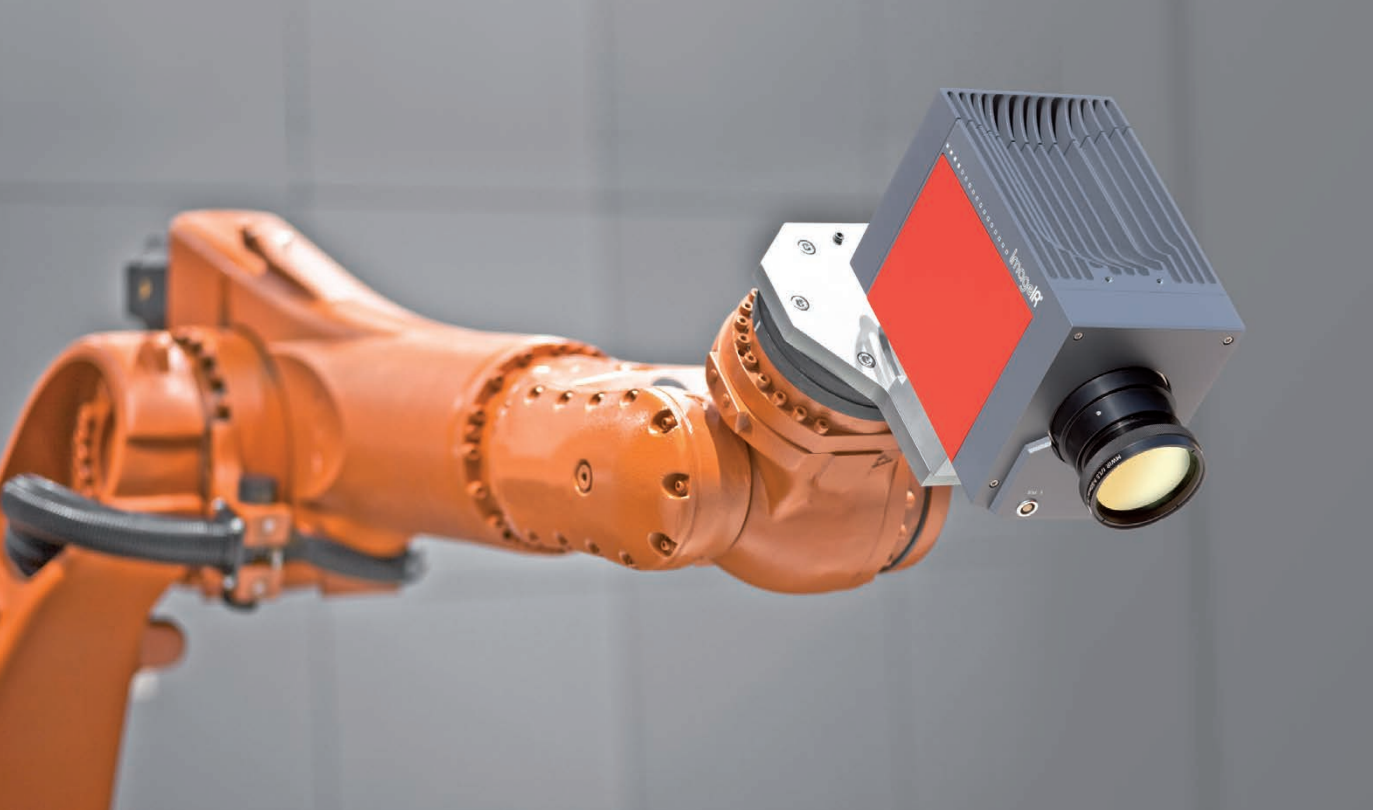


"We test the insulation resistance of generator components with two InfraTec cameras which are both versatile and easy to manage. Recently, we have sent in one of these cameras for a calibration and received a loan unit without any problems. Great service!"

*Hans-Bernd Twellmann
Siemens Energy, Mülheim on the Ruhr (Germany)*

InfraTec's Consulting Service:

Problem	Analysis	Solution	Realisation
Customer's request	Analysing the problem	Solving the problem	Individual product preparation
Task <ul style="list-style-type: none">Optimisation of existing processesIntegration of new technologySolving complex measurement tasksOptimisation of value-added chain	Individual System <ul style="list-style-type: none">Analysis of the measurement task in dialogue with our customerPresentation of our equipment technology to our customer on site	<ul style="list-style-type: none">Optimisation of measurement arrangementSelection or reconception of an appropriate camera system with an additional software packageSelection of accessories and the appropriate lenses	<ul style="list-style-type: none">Delivery of the customised camera systemInstructions for customers to the equipment technology and softwareOffering training courses
	Turnkey Automation Solutions <ul style="list-style-type: none">Analysis of the measurement situation, respectively customer processes in coordination with the customerOn-site inspectionDefining the measurement task	<ul style="list-style-type: none">Project planning: industrial planning of automation solutions by consistently receiving customer's feedbackDeployment of software for specific applicationsSelection of the optimal technology	<ul style="list-style-type: none">Complete realisation of the project at our companyIntegration of solutions into existent customer processesOn-site installationInstructions for customers



Quality Assurance for your Processes

Increase your added value through perfectly customised industrial systems by InfraTec. We realise your project at our company. Benefit from our long experience in automation projects all over the world.

Resistant Technology “Made in Germany”

Specially-designed for the industrial continuous operation, only most solid camera technology is deployed in process integration. Industrial-suited system components, housing and special cabling ensure a long lifecycle – including the CE declaration of conformity by InfraTec.

We supply you with professional measurement technology from Germany. The thermographic systems originate from our own manufacture or from our long-term partner Jenoptik.

Individual Solutions

After a thoroughly performed analysis of your processes and with the knowledge of your specific requirements, we develop together an exact conceptual formulation for your individual

solution. Test criteria for measurements are stipulated in detail. We create your thermographic automation solutions including an on-site installation. After commissioning, we will train your staff and undertake maintenance in order to secure your investment in the long term.

Typical Applications of Thermographic Automation

- Measuring temperatures non-reactively and without any contact
- Detect hotspots on fast-rotating or moving objects
automatic test on product's quality
- Perceiving fires before their emergence
- Identifying hidden deficiencies of materials and structural components
- Non-destructive examination of components and assemblies
- Thermographic systems for object monitoring



We research and develop on behalf of you

"InfraTec's engineers supported me at short notice in calculating alternative calibration curves for my camera system. Therefore, I quickly found the optimal solution for a tricky measurement task. I felt perfectly advised."

*Jan Sievert
Robert Bosch GmbH,
Schwieberdingen (Germany)*

Our development department conducts applied research on thermography at our headquarters in Dresden where camera and sensor technology is continuously further developed. Perfectly-equipped measurement laboratories provide best conditions for highly skilled engineers in realising customer's projects. Our development teams trust in their many years' experience with infrared and micro system technology.

Your secure Investment

Particularly difficult tasks of thermography are previously examined by us in order to decide which camera system is most suitable for solving your thermographic problem. Feasibility studies provide security for your purchase decision. Either in our laboratories or on-site, extensive preliminary investigations and material tests are carried out by our experts. On the basis of these findings and our expertise we will define your ideal camera system including an additional calibration for upcoming measurement tasks. Consequently, being on the safe side, your needs will be fulfilled.



Innovations to Grasp

German engineering and 20 years of experience in thermography let create useful innovations for your demand. Your ideas and suggestions are our strongest motivation.

Customised Measurement Technology

We develop cameras for all fields of application and especially for demanding users. In particular, we are very proud of our company high-end camera series ImageIR®.

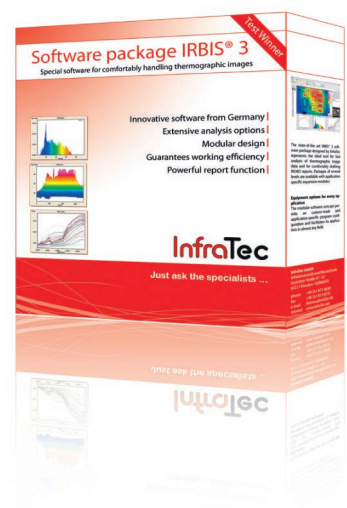
Special infrared optics, optional equipment and extensive accessories are produced by us fulfilling your needs. On creating, structuring and prototyping electronic circuitry, lenses and optical channels, we deploy all our skills and expertise.

Convenient handling with Measurement Data

Our company thermographic software family IRBIS® 3 provides support on recording, evaluation and editing thermographic data. With the help of the report generator, you are able to create Microsoft Word files in an instant. The extensive control and acquisition software enables a convenient remote control of your camera. Software updates can be regularly received free of charge on our website.

The most suitable Tool for each User

The modular design of IRBIS® 3 supports you in order to save expenses. Supplying each user with the most suitable means, numerous extensions are customised individually. With the help of our software module IRBIS® 3 mosaic, for instance, users are able to construct a complete thermogram out of several single images. For analysing and evaluating building physics, we recommend our special thermographic software FORNAX 2 supporting experts and energy advisors additionally with complex algorithms based on implemented climate and building material databases.





We are creative

Apart from infrared sensors, company thermographic systems are manufactured at our headquarters in Dresden. The flagship among InfraTec's high-end cameras is our own developed camera series ImageIR®.

High-tech and conceptual Accuracy

Due to the modular construction of our systems, we are able to provide the best solution for your specific case of application. According to your demands, our development department constructs, customises equipment individually and examines the fulfilment of all your application's requirements.

Before delivery, accurate inspections are performed on each outgoing camera. In order to guarantee excellent technical functionality on actual manufacturing conditions, defined load testings, for instance in a climatic chamber, are carefully carried out. Additionally, all individually developed software components are also explicitly tested before their employment.

A sense of Proportion for high Accuracy

Our high demands on functionality and quality are fulfilled by applying high quality material and components. Assemblies are carried out carefully by our experienced engineers and skilled workers building up and activating complete systems on site. Thus, thermographic systems and automation solutions come into existence which you will be totally satisfied with.

"As a research institute we have high demands on our measurement devices. We are very satisfied with our InfraTec camera. It can be applied flexibly for various measurement tasks as it is very mobile and handy."

*Sebastian Nowotny
Institute of Structures and Design at the
Deutsches Zentrum für Luft- und Raumfahrt e. V.,
Stuttgart (Germany)*



Our Service supports you

We exceed your Expectations

On deciding for one of our systems, the respective one will be exactly calibrated according to your needs. Each camera is provided with extensive accessories, informative manuals and the appropriate software for analysing measurement data.

Repair and Maintenance

We help you with words and deeds especially after the purchase of your thermographic camera. Send us your infrared system for regular maintenance. In case of technical issues, we collect your system and provide, on demand, an equivalent substitute until your system is again fully operational.

We measure at the large and small Scale

Extensive geological conditions or ecological damage can be detected by us through thermographic recording from the air. Thermal processes of smallest elements can be analysed accurately to the exact micrometre.

A perfect Expert Knowledge

Exact Technical Know how

Instructions for your new camera system and the respective application of the analysis software can be provided by us on site. Experienced experts in thermography train your staff in customised seminars not to leave out any questions.

Extensive Seminars and Trainings

All you need to know in theory and practice can be learned in our InfraTec seminars on thermography. Our high-skilled and hands-on experienced staff equip you with knowledge in small groups. All your questions will be answered in informative training sessions providing individual advice and support. Participants are supplied with detailed training material which helps them to consolidate the acquired knowledge at home. Furthermore, InfraTec offers especially for advanced users additional and certified infrared thermography seminars on level 1 (in accordance with DIN EN ISO 9712) which regularly take place at our training centre in Dresden.

Why to choose InfraTec

- More than 20 years of experience
- More than 50 camera systems and 6,000 customers worldwide
- Expertise on almost every application field of thermography
- High-skilled specialists and engineers
- Secure investment through preliminary feasibility studies
- Customer-specific systems
- Most recent infrared technology "Made in Germany"
- Customised software for all camera systems
- Extensive service before and after purchasing



Just ask the Specialists! Just ask InfraTec!

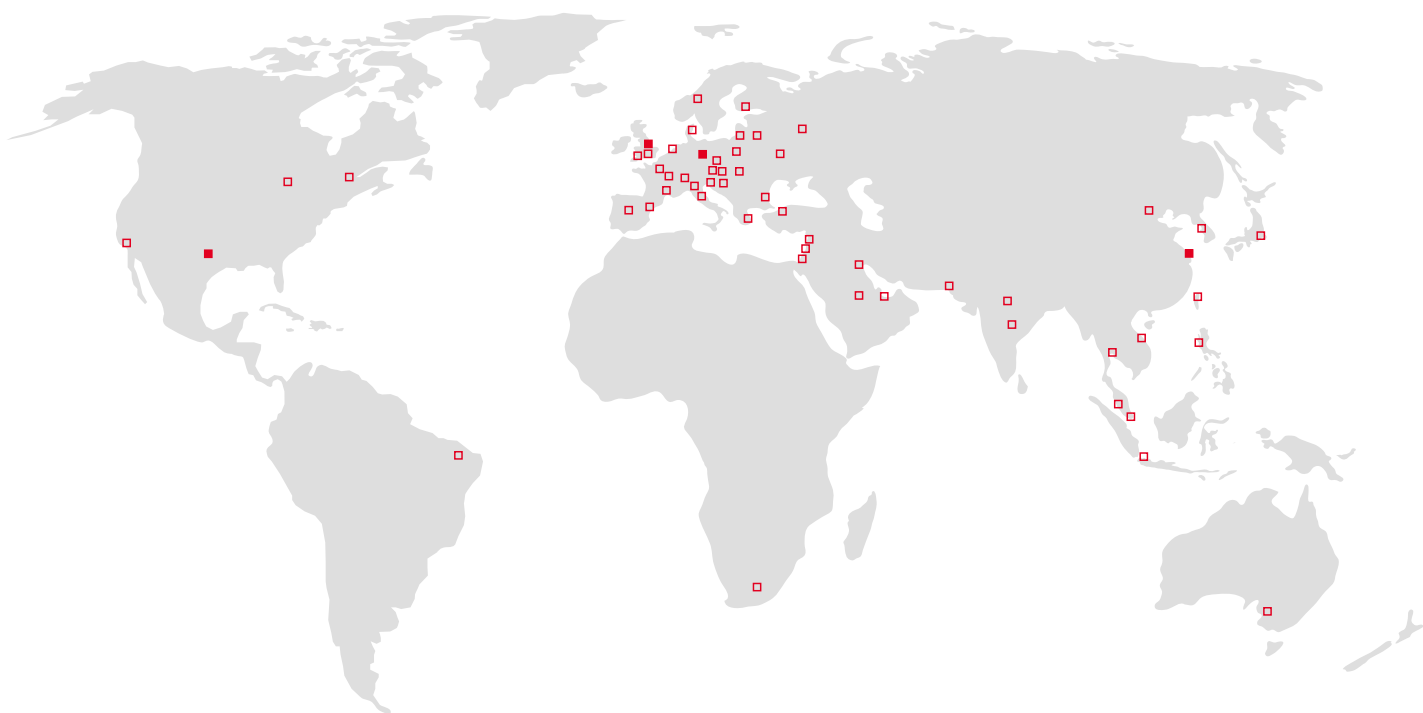
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The international markets are served via a global network of local partners. Further information as well as direct contacts you can get at our website www.InfraTec.eu.

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