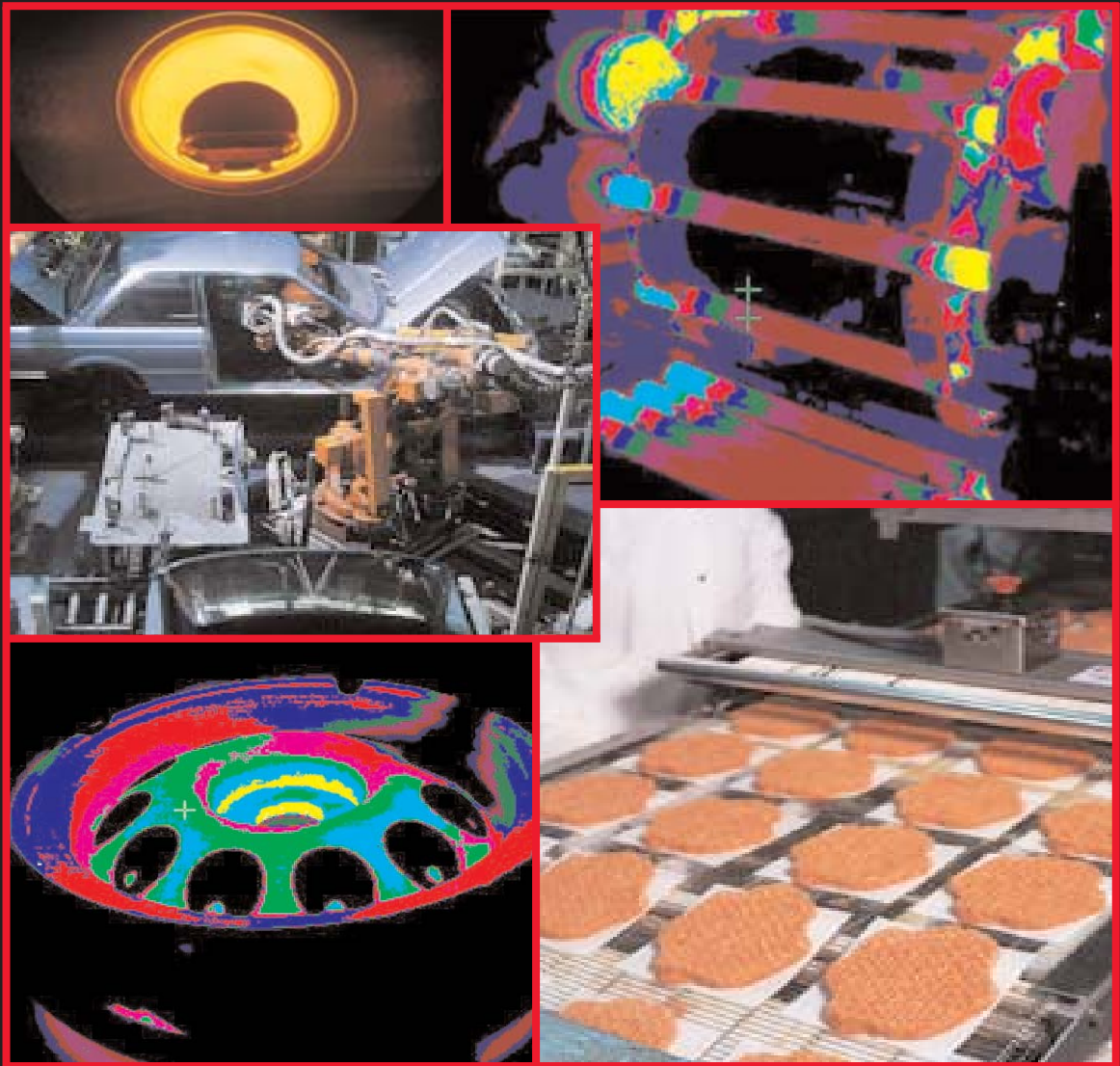


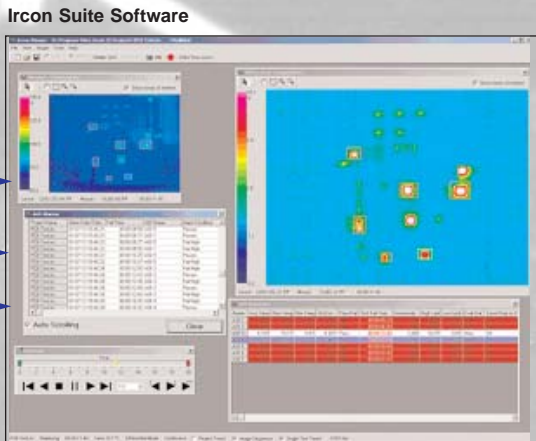
IRCON Thermal Imaging System Solutions



Hardware • Software • Controls



Ircon's Industry-Specific Systems



Optional STIO
Digital Inputs,
Relay Outputs

Optional
STAO
Analog
Output,
Relay
Outputs

Serial or TCP/IP
Communication



Applications

- ◆ Aluminum Wheel Mold Temperatures
- ◆ Automotive Backlight Inspection
- ◆ Bag Sealing
- ◆ Converting
- ◆ Flooring Materials
- ◆ Food Packaging
- ◆ Garbage Pit Monitoring
- ◆ Incineration
- ◆ Paper Manufacturing
- ◆ Plastic Extrusion Processes
- ◆ Plastic Films
- ◆ Printer Circuit Board Inspection
- ◆ Reheating of PET Preforms
- ◆ Seam-welding of Plastics
- ◆ Semiconductor Processing
- ◆ Tank Level Monitoring
- ◆ Thin Film Transistor
- ◆ Torpedo Car Monitoring
- ◆ TV Tube Mold Temperatures
- ◆ Fiber Optic Production

Molten Steel



Bottle Manufacturing

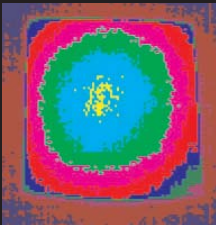


Fiber Optic Production





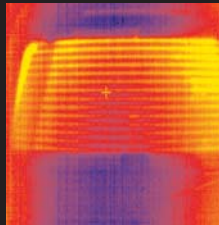
Food



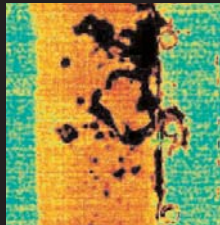
Textiles



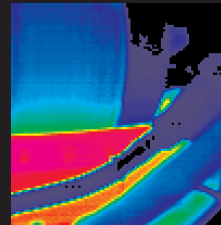
Windshields



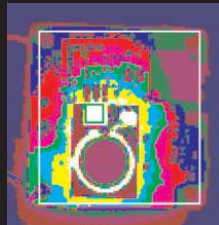
Metal Corrosion



Extrusion



Electronics



Thermal Imager Specifications

Camera



Performance

Detector-type	uncooled FPA 320 x 240
Detector size	51 x 51 microns
Camera f/#:	F/1.4; F/2.3
NETD (NET)	0.1°C @ 25°C
Analog video signal output	NTSC @ 60 Hz (PAL @ 50 Hz) 25 frames per second
Digital video signal output	12 bit 60 (NTSC) or 50 (PAL) frames per second
Remote control	RS-232

Measurement Accuracy

2°C or 2% of reading, whichever is greater

Temperature Measurement and Spectral Ranges

Low	0 to 250°C (32 to 500°F)	8 - 14 μ
	0 to 500°C (32 to 950°F)	8 - 14 μ
Medium	300 to 1200°C (575 to 2200°F)	8.0 μ

Physical

Size	13.56 x 5.0 x 3.88 inches (344 x 127 x 98 mm)
Weight	6.5 lbs (2.95 kg)

Environmental

Operating/storage temperature	0 to 45°C (32 to 113°F)
-------------------------------	-------------------------

Required Operator Interface

- Pentium IV 1.5 GHz
- AGP 4x video card using minimum 16-bit color display
- 256 mb RDRAM
- Monitor with 1024 x 768 pixel size
- CD-ROM
- 7200 RPM 12 GB Hard drive
- COM port (one)
- Windows® 2000 operating system

Consult factory for specific requirements

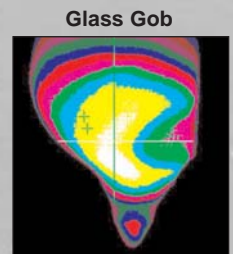
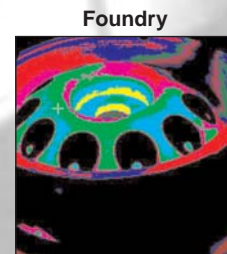
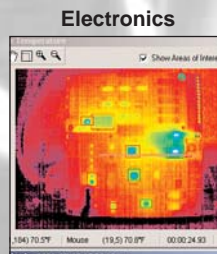
Lens Selection



Model No.	Focal Length	Minimum Focus	Field of View (FOV)
SL01	13 mm	51 mm (2 inches)	69° x 53°
SL02	25 mm	305 mm (12 inches)	36° x 28°
SL03	50 mm	560 mm (22 inches)	18° x 14°
SL04	100 mm	780 mm (70 inches)	9° x 7°
SL CF*	close focus	133-267 mm (5.25 to 10.5 inches) Focus Distance	50 mm x 76 mm @ 254 mm (2 inch x 3 inch @ 10 inches)

* Example of Spot size:
.25 mm @ 152 mm (.010 inches @ 6 inches)

Note: All specifications subject to change without notice



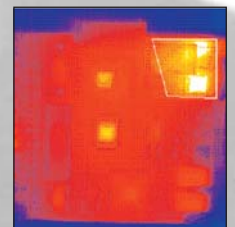
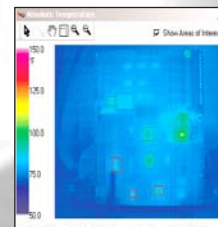
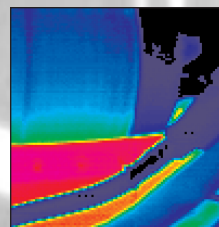
System Benefits

The Ircon Stinger system is a complete package comprised of the Stinger Radiometric Thermal Imaging camera and a computer running one of the many Ircon software products that performs data processing and analysis for your specific application.



Benefits

- ◆ A total system solution from Ircon, utilizing our 40 years experience in industrial process control applications.
- ◆ For rapid response to changes in your process, the system speed can be adjusted up to 60 frames per second.
- ◆ Depending upon your environmental conditions, Ircon offers enclosures to meet your needs.
- ◆ Because industrial environments are not always stable, Ircon's breakthrough design monitors camera performance to guarantee accurate radiometric temperature measurements.
- ◆ Unlike dated "cooled" technology, our camera provides years of quality service without the maintenance expense found in older camera designs.
- ◆ Direct alarms to your process as either "Pass", "Fail", or "Busy" often allows the Ircon system solution as the only package you will require.
- ◆ Your application is not generic. Ircon offers specifically designed software packages for your industry.
- ◆ The Ircon system provides a number of communication formats to easily link to your system such as relays, analog outputs, TCP/IP, or serial communications up to 60 Hz per second.
- ◆ Understanding proprietary software can cost time. Ircon's solution provides a suite of Windows-styled software products that are simple to use.
- ◆ To avoid start-up delays, Ircon's systems are wired, the software is loaded into the camera, and the complete system is checked out prior to shipment - and, to help assure simple start-up and staff training, Ircon offers Field Start-Up assistance.



System Accessories and Service

Accessories

Ircon provides a variety of optional accessories for the Stinger™ Radiometric Thermal Imaging System to simplify mounting to protect the camera from hostile environments, and provide you with a customized package for your needs.

- ◆ Model SB-1 Swivel Mounting Base
- ◆ Model EEST1 Water-Cooled Environmental Enclosure for the Stinger camera
- ◆ Model STPC1 Operator Interface PC
- ◆ Model STIO I/O Relay Module (includes digital input for initiating tests and four relay outputs for AOI outputs and pass/fail alarms)
- ◆ Model STAO Analog Output/Relay Module (includes analog output of AOI temperatures and four relay outputs for AOI outputs and pass/fail alarms)



Special Services

System Field Start-Up Assistance

Ircon can provide skilled factory service staff to assist you in the installation of the Stinger Radiometric Thermal Imaging system, thereby assuring that the installation is completed correctly and the software is properly installed. Consult factory for details.

PC/Software Installation

Ircon can install your Thermal Imaging software on your PC at our Niles, Illinois factory if it meets the minimum performance specifications. Consult factory for details.

Global Offices

Our headquarters are based in Niles, Illinois USA; our channel offices are located worldwide. Check our web site at www.ircon.com for specific locations or email us at info@ircon.com.

World Headquarters

Ircon, Inc.
Niles, Illinois USA
Tel: 847 967 5151 or 800 323 7660
Fax: 847 647 0948
E-mail: info@ircon.com
Web site: www.ircon.com

European Headquarters

Ircon BV
Amersfoort, The Netherlands
Tel: 31 33 450 4321
Fax: 31 33 340 4320
E-mail: info@ircon.nl

International Offices

Ircon China
Shanghai, P.R. China
Tel: 86 21 5385 5332
Fax: 86 21 6375 8139
E-mail: yuanyl@sh163.net

Ircon Korea
Anyang-City, Kyounggi-Do,
Republic of Korea
Tel: 82 31 383 6961
Fax: 82 31 387 8025



NIST Calibration Provider

