

## SPECIFICATIONS

<b>FTI 6 SPECIFICATIONS</b>		<b>POWER REQUIREMENT</b>
Temperature range:	-20 to 2000°C/-5 to 3600°C based on blackbody temperature	Power source: 9 to 16V d.c., 2 amps
Focusing range:	0.5m/18in	<b>IMAGE MEMORIES</b>
Frame frequency:	20 Hz	Data memory: Storage of 64 thermal and visual scenes on PCMCIA card
Field of view:	16° (horizontal) x 16° (vertical) 6.4° (horizontal) x 6.4° (vertical) 40° (horizontal) x 40° (vertical) 60° (horizontal) x 60° (vertical)	Erase: Either single images or entire memory
Image pixels:	256 (horizontal) x 256 (vertical)	Real-time memory: 512 images at full frame rate 26 seconds (option)
Detector:	Thermoelectrically cooled HgCdTe, FPA	<b>ACCESSORIES</b>
Spectral response:	'L' range: 3.2 to 4.2µm 'M/H' range: 3.9µm	Optional: LIPS F or LIPS T image processing software; remote control unit; 0.4x wide angle lens; 2.5x telephoto lens; 0.25x wide angle lens; close focus lens; microphone headset; monitor
Image display:	256-step grey or colour scale, black/white reversible, image freeze, date, time	<b>ENVIRONMENTAL ACCESSORIES</b>
Video outputs:	PAL, NTSC or S-VHS composite video	Environmental housing; adjustable mounting; mounting brackets; water cooled plate; air purge; pan & tilt assembly
Digital outputs:	RS 232C, RS 422A or RS 485, Parallel (option)	
Dimensions:	153(W)x174(H)x153(D)mm/6(W)x6.8(H)x6(D)in	
Weight:	3.9kg/8.58lb	
<b>TEMPERATURE MEASUREMENT</b>		
Measuring area:	1.1 mrad x 1.1 mrad square minimum	
Temperature range:	'L' range: -20 to 200°C/-5 to 400°F 'M' range: -20 to 650°C/-5 to 1200°F 'H' range: -20 to 2000°C/-5 to 3600°F	
Display resolution:	0.1 to 1° (C or F)	
Compensation factors:	Emissivity, background temperature	
Measurement modes:	Spot, peak, valley, difference, isotherm, profile	

<b>SPECIFICATIONS</b>		<b>ACCESSORIES</b>
<b>LIPS F - FIXED SYSTEM SOFTWARE</b>		Supplied: Software, frame grabber card
Image acquisition:	Continuous video output of the <b>FTI 6</b> using the frame grabber card (LIPS F only) Individual images via the digital input/output option	Minimum system requirements: IBM-AT compatible PC, 266MHz Pentium with PCI bus Microsoft® Windows 95® or NT® V4.0 or later 16MBytes RAM Windows 95® 32MBytes RAM Windows NT® PCI bus graphics card capable of 800x600 at 65536 colours, SVGA monitor 2 button mouse
File handling:	Images stored as data files (IMG or BMP)	
Temp. processing:	Measurement at points or areas, profiles, histograms, isotherms	
Colour:	5 palettes (including monochromatic)	
Remote control:	Via digital input/output link	
<b>LIPS T - TRANSPORTABLE SYSTEM SOFTWARE</b>		
As above with additional		
Image processing:	Zoom, noise filter, blur (LIPS T only)	
Report generation:	Can include thermal images, visual images (IMG or BMP) temperature displays, text, title and company logo (LIPS T only)	

The Quality Management System of Land Instruments International Ltd. is approved to BS EN ISO9001:2000 for the design and manufacture, stockholding, in-house repair and site servicing of non contact temperature measuring instrumentation. Associated software designed and developed in accordance with TickIT.

Calibration certificates are available from our UKAS accredited Calibration Laboratory No. 0034. The Land calibration laboratory complies with the requirements of the international standard BS EN ISO/IEC 17025.

**CE** The **FTI6** complies with current European directives relating to electromagnetic compatibility and safety (EMC directive 89/336/EEC; Low voltage directive 73/23/EEC).



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# LAND



## FTI 6

### NEW THERMAL IMAGING SYSTEM



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# LAND FTI 6 THE LATEST THERMAL IMAGING SYSTEM FOR PROCESS MONITORING AND PLANT SURVEILLANCE

The new FTI 6 thermal imager incorporates the latest focal plane array detector technology ingeniously engineered to produce accurate temperature measurement - ruggedly constructed to cope with demanding industrial environments.

Using unique, state-of-the-art digital processing, FTI 6 provides accurate and highly stable industrial radiometric imaging and temperature measurement from -20 to 2000°C/-5 to 3600°F.

FTI 6 is the only imager specifically designed for permanent installation with an integral visual video camera which enables scenes to be viewed as thermal, visual or in combination.

Unlike other imagers using FPA technology, the FTI 6 uses thermoelectric cooling which is designed for long service-free life.

FTI 6 is rugged and reliable which allows it to be used either as a permanently mounted continuous plant sensor or as a transportable process imaging system for investigative and test purposes.

Audio commentary also can be added to provide a comprehensive record of the process under observation.

## PERMANENT PLANT SENSOR

- Rugged construction, sealed to IP65
- Drift-free, real-time temperature analysis
- Alarm functions
- DDE and OLE links with external software applications
- Full control through LIPS F Software
- Easy plant installation
- Range of mounting options



## TRANSPORTABLE TEST SYSTEM

- Powerful on-board temperature analysis
- Report generation using LIPS T software
- Control from remote keypad or PC
- Unlimited image storage on PCMCIA cards
- Light, compact and easily transportable

## RANGE OF ACCESSORIES:

- Choice of lenses
- Environmental housing
- Range of mountings and cooling accessories
- Lens air purge
- RS232C, RS422A or RS485 digital interface with PC

## REMOTE CONTROL

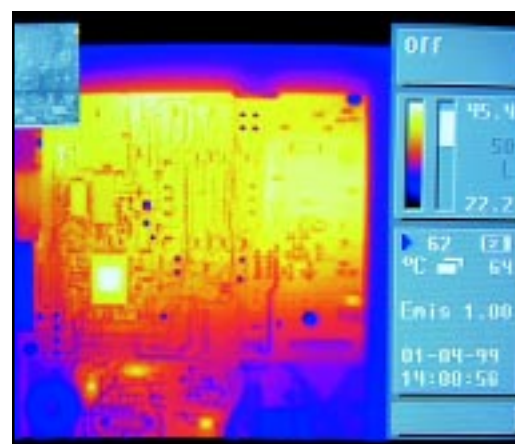
The FTI 6 can be remotely controlled via a digital communication link from a PC running the new LIPS F and LIPS T software systems. A separate remote control unit is also available.

## LIPS F AND LIPS T THERMAL IMAGING SOFTWARE

The new LIPS thermal imaging software provides a powerful and flexible process measurement and control system for thermal analysis and full control of up to 16 FTI 6 imagers.

## FEATURES OF LIPS:

- LIPS F - on-line thermal analysis system. Includes points, areas, isotherms, histograms, profiles, alarm generation and export.
- LIPS T - analysis and reporting system. Includes processing and analysis of stored images, and report writing facility.
- Control and analyze information from up to 16 imagers.
- Optional control module for up to four pan & tilt units.
- Automatic storage of images on receipt of alarm signals.
- Exchange of information with other Microsoft Windows® applications using DDE and OLE.
- Extensive image processing - full colour display with choice of five palettes, zoom, and noise filtering.
- Complete parameter control - temperature units, emissivity, background temperature and distance.
- Produce, edit and print colour thermal reports in minutes with the easy to use Report Writer facility.



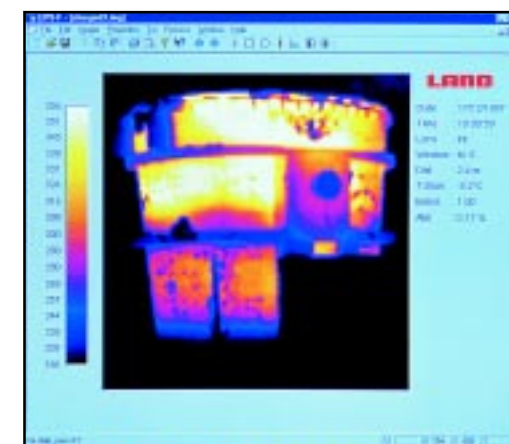
The only purpose designed on-line imager with combined thermal and visual images



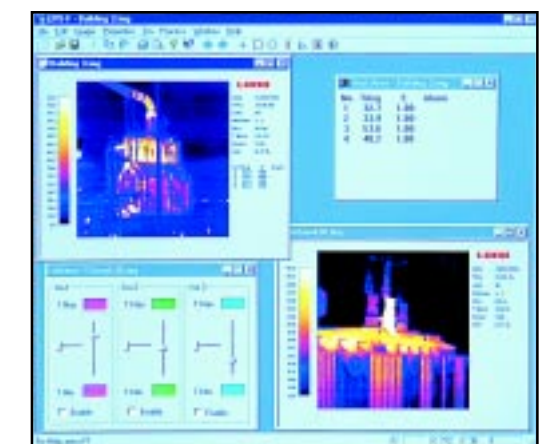
Unique state-of-the-art digital processing provides highly reliable drift-free measurement



Extensive range of mountings and accessories includes pan & tilt, remote controller and cart



LIPS F and LIPS T thermal imaging software system



LIPS provides points, areas, isotherms, histograms, profiles and alarms