

Introducing the new affordable, full featured thermal imaging camera

CYCLOPS TI 814

This full featured, high performance thermal imaging camera has a temperature measurement range from -20 to 1500°C/-4 to 2732°F and a high quality aspherical lens with motorised focus and digital zoom. Thermal images are displayed in the viewfinder and bright LCD display. They can be displayed and captured for later use in reports. Images and sound files are saved on to a Compact Flash memory card for download and further analysis.

The right camera for predictive maintenance and Production processes.

Detect the symptom before the problem occurs. High Resolution image quality helps you quickly find the problem. The Cyclops TI 814 imaging camera is used in plant Condition monitoring ,structural integrity inspection, quality control, and research and development in industries such as:

Power generation, transmission and distribution

Over heating of switch gear ,transformers, bus- bars, over head power lines and substations can be easily detected . . .

Electrical and electronics

Faulty components in electronic equipment quickly identified...

Energy management and thermal surveys

Building leaks, air infiltration, missing boiler insulation, blocked pipework and steam traps can be easily monitored . . .

Steel and glass

Refractory wear can be determined in furnaces, ladles and torpedo cars . . .

Construction and civil engineering

Integrity of cladding on buildings, faulty construction methods, cold storage units and asphalt surfacing . . .

KEY FEATURES

- On board colour digital camera option
- Motorised focus and electronic zoom
- On board image processing
- Laser pointer
- Extended temperature range option to 1500°C/2732°F
- Extended ambient operating temperature range option down to -40°C/-40°F
- Standard camcorder battery lasting ~3 hours
- Tele lens option
- Live video transmission option to 0.75km/0.46 miles
- High-resolution image with very low spatial noise
- Accurate temperature measurement
- Low cost
- Real time images
- Store images to CF memory card
- Long wavelength detector (ideal for outdoor applications)

The Cyclops TI 814 thermal imaging camera is complemented by the Land Image Processing Software - LIPS, which provides thermal and visual image manipulation and storage together with report writing facilities. LIPS is easy to use, highly flexible, and greatly enhances the versatility of the Cyclops TI 814.

Portable Thermal Imaging Camera - Specifications

Imaging Performance

Field of View/Min Focus Distance:	21° x 16°/0.38m/15.0in (11° x 8°/1.8m/71.0in optional)
Spatial Resolution:	1.2mrad (IFOV)
Thermal Sensitivity:	0.08°C at 30°C (at 50/60Hz)
Electronic Zoom Function:	x2, x4
Focus:	Motorised
Detector:	320 x 240 Uncooled Amorphous Silicon Microbolometer (FPA)
Spectral Range:	8 to 14µm
Visual Image:	On board digital colour video, 640 x 480 pixels (optional)

Image Presentation

Built-in high resolution colour LCD (TFT)	
Viewfinder:	10.2mm/4.0in LCD
External Display:	PAL/NTSC Composite Video
Video Output:	

Measurement

Temperature Ranges:	-20 to 500°C/-4 to 932°F (up to 1500°C/2732°F optional)
Accuracy:	±2°C or ±2%
Measurement Modes:	Spot/manual (up to 4 moveable), spot/automatic placement at max, area (up to 4 moveable) displaying either max, min, or average, isotherm, line profile (up to 3)
Display Colour:	8 palettes available
Emissivity Correction:	Variable 0.1 to 1.0 (in 0.01 increments)
Measurement Features:	Automatic corrections based on user input for ambient temp, distance, relative humidity, atmospheric transmission and external optics

Image Storage

Type:	Removable Compact Flash Memory Card (256Mb)
Image Storage:	1000 images
Voice Annotation:	8 seconds of digital voice clip stored with each image

Interface

Video Output:	PAL/NTSC
Live Video Transmission	Transmit live video up to 750m to a remote monitor
Laser Locator:	Class 2, semiconductor A1GaInP diode laser: 1mW/635nm (red)

Power Source

Power Supply:	Rechargeable Lithium-ion Camcorder battery, field-replaceable
Battery Operation:	Over 3 hours continuous operation
External Power Operation:	a.c. adapter, 110/220V, 50/60Hz
Power Requirement:	7.2V d.c.

Environmental

Operating Temperature:	-25 to 60°C/-13 to 140°F (-40 to 60°C/-40 to 140°F optional)
Storage Temperature:	-40 to 60°C/-40 to 140°F
Humidity:	Operating and storage 10% to 95% non-condensing
Enclosure:	IP54 IEC 529
Shock:	Operational - 25G, IEC 68-2-29
Vibration:	Operational - 2G, IEC 68-2-2

Physical Characteristics

Camera Dimensions:	104mm x 107mm x 148mm/4.1 x 4.2 x 5.8in (camera only)
Camera Weight:	1.5kg/3.3lb (including battery and LCD)
Tripod Mounting:	1/4in

TI 814 System Includes:

IR camera with laser locator	Carrying case and strap
LIPS software	Lens cap
Wrist strap	A.C. power supply
Battery charger and 2 batteries	Video cable
256MB Compact Flash memory card	USB CF memory card reader



High quality motorised focus lens



Laser targeting pointer



Bright back-lit LCD display



On board digital colour camera



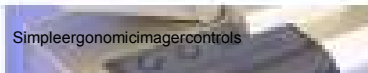
Voice recorder



RS232C and video output



Low cost rechargeable battery



Simple ergonomic imager controls



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