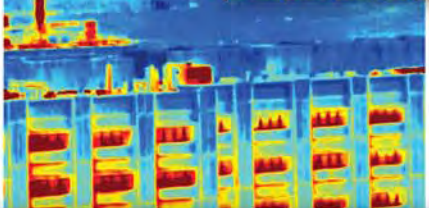
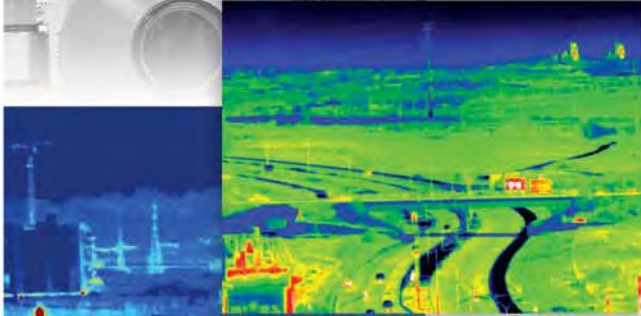
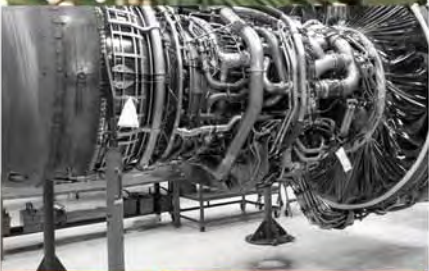


ThermaLab LWIR



Thermal Imaging
Thermal Modeling
Stress/Structure Testing
Non-Destructive Testing
Target Signature Analysis



Key Features

- Maximum pixel resolution of 1024x1024
- Maximum frame rate 120 Hz
- 14 bit image resolution
- Camlink interface
- Filter wheel assembly and optional filters available
- ThermaLab control and configuration software
- Customized lenses available (including zoom)



The Cantronic ThermaLab LWIR is an extremely high sensitivity infrared imaging camera that is specially designed for scientific research and development application. The patented QWIP IRFPA cooled detector operates in the long wavelength region (LWIR.)

ThermaLab cameras are normally used with a PC for control, image display and other advanced features through a Camlink interface. Using a Windows OS and ThermaLab software, the user can configure software settings and benefit from advanced live display/real time storage. These cameras may also be used as a standalone unit or integrated into the customer's own system.

ThermaLab LWIR

Specifications

Sensor
Pixel Resolution/FPA Size

QWIP IRFPA

Model	Pixel Resolution	FPA Size
TL5000	320 x 256 pixels	28µm x 28µm (pitch 30µm)
TL5500	640 x 512 pixels	22µm x 22µm (pitch 24µm)
TL8000	1024 x 1024 pixels	18µm x 18µm (pitch 19.5µm)



Wavelength
Image mode
Cooling
Frame rate (full image)
Integration time
A/D
NETD
Operation temp. range
F number
System control
Video output
Size w/o lens
Weight w/o lens
Power supply
Operating Temperature
Storage Temperature
Vibration

8-10 µm
Snap Shot
Stirling cooler
Programmable--Standard 1 to 60 Hz; Up to 120Hz with high frame option
Programmable(from 1ms to 10ms ; Typ. 16ms)
14 bits
<35mk (25mk typical for TL5000 and TL5500)
-20°C to 50°C
Standard F/2.3
Camlink
RS170 (NTSC) or CCIR (PAL) or VGA (PC)
250mm x 115mm x 220mm (9.9" x 4.6" x 8.7")
2.1 kg (4.6 lbs)
24VDC, 30W
-20°C +50°C
-20°C +70°C
10g during 6 ms in case of shock
3g RMS between 1 Hz and 500 Hz in random vibration
2g peak to peak between 1 Hz and 500 Hz in sine vibration
Filter wheel assembly and high temperature filters optional
Custom lenses (including zoom) available

Options

ThermaLab Radiometric Testing Software Features (Optional)

- Live image display
- Digital Range & Level setup
- Real time storage
- Spot measurements
- Profiles and temporal profiles
- Regions of interest
- Many color palettes
- ASCII data generation
- Several image formats available
- Radiometric calibration functions
- FPA calibration and characterization

PRELIMINARY

Cantronic Systems Inc.

(Worldwide Headquarters)
63A Clipper Street
Coquitlam, BC V3K 6X2 Canada
Phone: +1.604.516.6667
Toll Free: 1.866.391.6970
Fax: +1.604.516.6618
www.cantronics.com
sales@cantronics.com

QWIP Tech. Inc.

(US Subsidiary)
499 Nibus Street
Brea, California 92821
Phone: 714.529.7947
Fax: 714.529.7946
www.qwip.com
sales@qwip.com

Cantronic Int'l

(Europe & MidEast Sales)
Minneapolis, MN USA
Phone: 612-379-5010
Fax: 612-379-5011
europe@cantronics.com

Cantronic Systems, Inc.

(Thermography Division)
Hancock, MI USA
Phone: 906-482-0719
Fax: 906-482-0744
marketing@cantronics.com