

FREE shipping on orders over \$150 Offers Contact Us Help Track Orders

\$0.00



Thermal Imaging

Thermal Imaging technology has changed dramatically over the years. Thermal imagers are now more affordable, portable and accessible than ever before. A thermal imaging camera detects the intensity of radiation in the infrared region of the electromagnetic spectrum and converts it to a visible image. Thermography is indispensable when it comes to non-contact

Unlike regular digital cameras, which capture images of the visible light reflected by objects, thermal cameras create pictures by measuring infrared energy, or heat. The thermal camera then assigns colours based on the temperature differences it measures. In a "radiometric" imager, each pixel of colour on the screen indicates a specific temperature. Thermal cameras read the surface temperature of objects and can detect surfaces that don't emit thermal energy equally well. Emissivity is the material property that describes the efficiency with which an object radiates, or emits, heat.

Thermography's role has become more and more critical in electrical and mechanical equipment, industrial process building diagnostics and research and development. As thermal imagers evolve, features such as auto and manual focus, smart and rechargeable batteries and higher resolution are becoming the norm. Innovation in wireless testing, software, data logging and connections with smartphone applications makes thermal imaging an excellent option for maintenance

If the status of components can be identified before any failure, corrective measures can be taken in advance which will help in improved productivity. Thermal imaging cameras are the perfect tool for predicting failures because they make the

There are many variants of thermal imagers to choose from. Some factors to consider, when deciding what kind of imager best fits your business model, are Radiometric, Thermal (temperature) sensitivity and Pixel resolution. Infrared (IR) thermometers are reliable and very useful for single spot temperature readings, but, for scanning large areas or components, thermal imaging cameras are the best option. It's easy to miss critical components that may be near failure and need repair, so thermal imaging cameras can be used to prevent this.

Thermal imaging is a technology that will not only change our lives, but it will save lives as well.

eturn to main Maintenance and Safety page

Getting Started

- ▶ Thermal Imaging Guidebook for Industrial Applications
- ▶ Thermal Imaging Guidebook for Facilities Maintenance

Maintenance and Safety

- ▶ Thermal Imaging
- ▶ Electrical Testing
- ▶ Hand & Power Tools
- ▶ ESD Protection
- ▶ Safety

Browse Technologies

- ▶ Industrial Automation
- ▶ Wireless
- Sensors
- Motor Control
- Power Management ▶ Lighting
- Display
- Maintenance & Safety

Resources

Featured Articles

- . The 7 Secrets Of Better Infrared Imaging Quality
- The 7 Secrets Of Better Infrared Imaging Quality
 Thermal Imaging Basics For Building Inspections
 Aston Martin Red Buil Racing Keeps Its Data Center In Shape
 With The Help Of Thermal Imaging
 12 Things To Consider Before Buying An Infrared Camera
 8 Things Engineers Should Know About Thermal Imaging
 Thermal Imaging: The Surveillance Solution

- Developing An Inspection Program
 Grid-Eye State Of The Art Thermal Imaging Solution
 Using Infrared (IR) Thermography To Improve Electrical Preventive
- Maintenance Programs

 How Patent Pending Technology Blends Thermal And Visible Light

- Analyzing And Trending Battery Charging Temperature Rise Using An IR Thermal Imager And Handheld DMM Using Fine Resolution To Improve Thermal Images Tactical Applications Of Thermal Imaging In A Maritime Environment

- Environment
 How To Spot And Address Potential Process Problems Using
 Thermal Imaging
- Thermal Imaging

 Using Thermal Imagers In Photovoltaic Plant Maintenance

 Solving Electrical Problems With Thermal Imaging

Videos



Fluke Multisharp Focus For Infrared Cameras



Fluke Mounted Infrared Cameras



Preventative Maintenance

Featured Products



∆FLIR FLIR One PRO



IRC-110 Infrared Camera



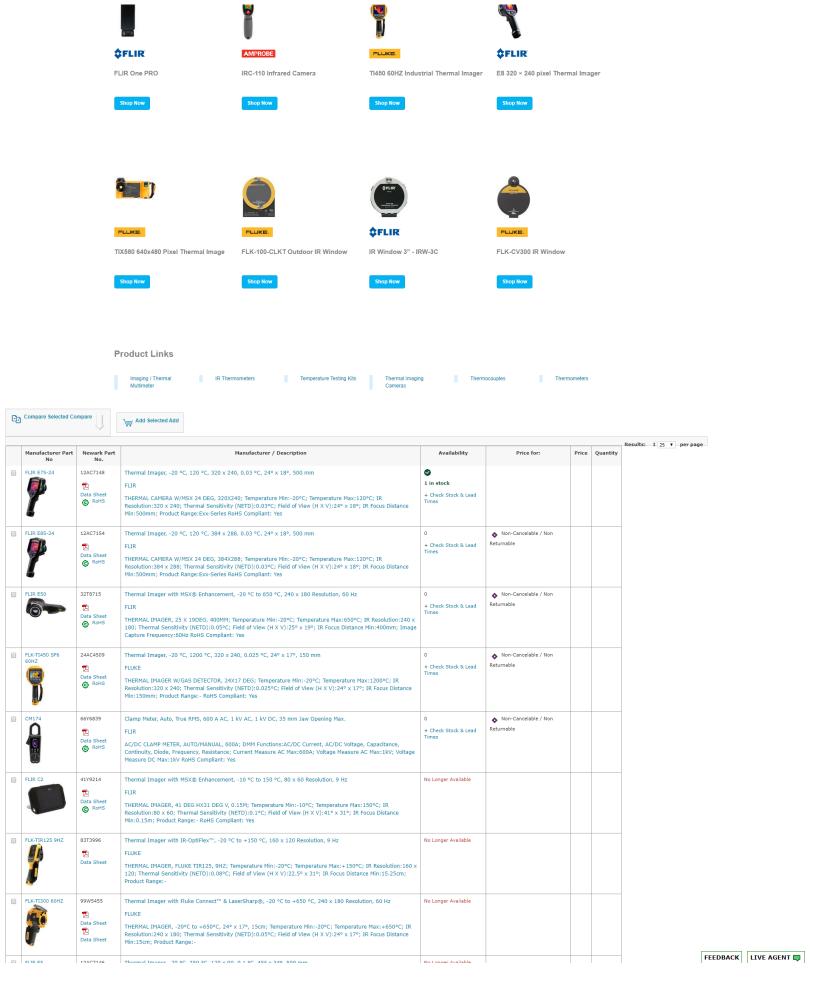


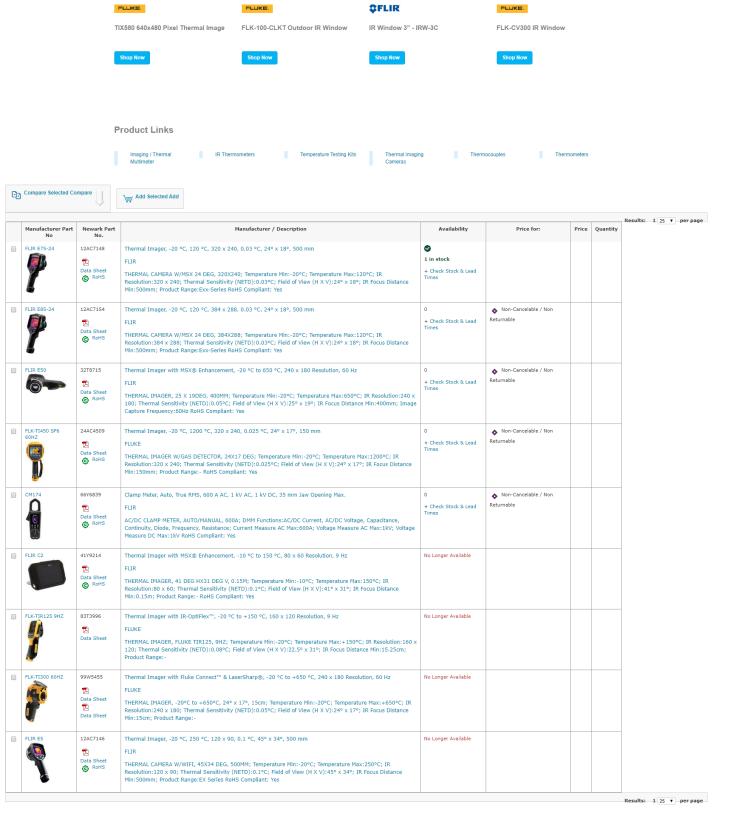
☆FLIR

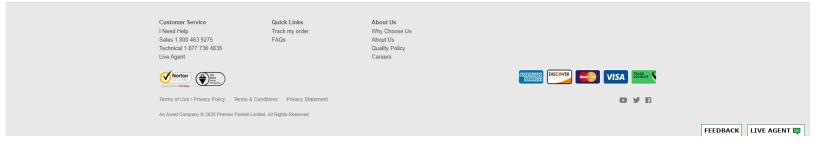
TI450 60HZ Industrial Thermal Imager

E8 320 × 240 pixel Thermal Imager

FEEDBACK LIVE AGENT







Custom Calibration Services



The Newark Custom Shop



Count On Quality & Accuracy

We stock accredited calibrated products and new instruments ready to use right out of the box from a variety of leading brands such as Keysight, Tektronix, Fluke, B & K Precision, and Tenma

Our comprehensive quality system is unmatched. Choose from multiple NIST traceable certificate options, including ANSI 2-540.1 and ISO/IEC 17025. Your instrument will have documented accurrent that immediately complies with your quality systems and regulatory requirements from the day it

To buy a pre-calibrated product on newark.com, just look for the CAL suffix added at the end of a manufacturer part number. There are three suffixes we use to indicate calibrated equipment: 'CAL' is standard, 'CAL D' is calibrated with data, and 'CAL DU' means the product comes calibrated with dat and uncertainties. If there is a particular product we took that you want calibrated but doesn't have an online option available, please reach out to our sales team for a quote at 1 800 463 9275.

Shop Now View More Custom Services

Most Popular Calibrated Products



Tektronix MDO3012 CAL

Calibrated 100MHz mixed domain oscilloscope



Calibrated with data true RMS DMM & resistance, continuity and diode test





Keysight 34980A CAL DU

Calibrated with data and uncertainties multifunction switch/measure unit with internal DMM option

Calibration Document Management

Cal/Web is proprietary web-based software designed to manage every aspect of your calibration and certification program. The software allows for managing invoices, service history, and calibration certificates Cal/Web is currently included for Newark customers and is able to track equipment from any manufacturer with full access to calibration certificates.

Exceptional Capacity & Scalability

More than 100 points of service including mobile and 1,100 highly trained experts world-wide means our unmatched suite of capabilities and services are available locally to most of the world's research and

Service Options

	Standard Calibration (Sample Certificate Without Data)	Standard Calibration w/ before and after (Sample Certificate With Data)	Accredited 17025 with Uncertainties (Sample Certificate With Data & Uncertainties)
ANSI/NCSL Z540.1 Compliant	х	х	Х
ISO/IEC 17025 Accredited Calibration			х
Traceable Calibration to National Standards	х	х	х
Out-of-Tolerance (OOT) Notification	х	х	х
As Found/As Left Test Data	OOT*	х	х
Online Electronic Certificate (DATA)	х	х	х
Test Point Specific Uncertainty Data			х
When order or quoting please add suffix to the Manufacturer's Part No.	Manufacturer's Part No. + CAL	Manufacturer's Part Number + CAL D	Manufacturer's Part Number + CAL DU

^{*}For those parameters found out of tolerance

Standard Calibration (ANSI/NCSL Z540.1)

Services compliant with this standard provide a calibration certificate with a calibration date and due date. A traceability statement is also provided. Measurement parameters not meeting the test specifications (out of tolerance) are identified and reported on the certificate

Standard Calibration with Data (Before/After Data)

Services compliant with this standard provide a calibration certificate with a calibration date and due date. A traceability statement is also provided. Complete before/after measurement data is included, listing the test name, measured value, and test limits for each parameter tested during the calibration process.

17025 Accredited Calibration (with Uncertainties)

Instrumentation is calibrated in accordance with ISO/IEC 17025 Instrumentation is calibrated in accordance with ISO/IEC 17025 within our approved scope of accordation. Accordidation acrosted calibrations provide a certificate of calibration with the accrediting body's logo on the document. The calibration date is on the certificate, calibration due date is only piaced on the document when specified by the customer or contractually agreed upon. A traceability statement is also provided. Measurement data and uncertainty for each parameter tested during the calibration is included.

What else are you looking to customize? Click any of the below to find out how we can help.

	-	•
Components	Raspberry Pis	Kits
Panel Meters	Connectors	Enclosures

FEEDBACK LIVE AGENT

Document title: Calibration Service | Newark

Capture URL: https://www.newark.com/calibration-services#

Capture timestamp (UTC): Fri, 09 Oct 2020 21:39:05 GMT Page 1 of 2

Most Popular Calibrated Products



Tektronix MDO3012 CAL

Calibrated 100MHz mixed domain oscilloscope





FLUKE-87-5 CAL D

Calibrated with data true RMS DMM & resistance, continuity and diode test

Shop Now



Keysight 34980A CAL DU

Calibrated with data and uncertainties multifunction switch/measure unit with internal DMM option

Shop Now

Calibration Document Management

Call/Yeb is proprietary web-based software designed to manage every aspect of your calibration and certification program. The software allows for managing invoices, service history, and calibration certificates Call/Yeb is currently included for Newark customers and is able to track equipment from any manufacturer with full access to calibration certificates.

Exceptional Capacity & Scalability

More than 100 points of service including mobile and 1,100 highly trained experts world-wide means our unmatched suite of capabilities and services are available locally to most of the world's research and manufacturing centers.

Service Options

	Standard Calibration (Sample Certificate Without Data)	Standard Calibration w/ before and after (Sample Certificate With Data)	Accredited 17025 with Uncertainties (Sample Certificate With Data & Uncertainties)
ANSI/NCSL Z540.1 Compliant	х	х	х
ISO/IEC 17025 Accredited Calibration			х
Traceable Calibration to National Standards	х	х	х
Out-of-Tolerance (OOT) Notification	х	х	х
As Found/As Left Test Data	OOT*	х	х
Online Electronic Certificate (DATA)	х	х	х
Test Point Specific Uncertainty Data			х
When order or quoting please add suffix to the Manufacturer's Part No.	Manufacturer's Part No. + CAL	Manufacturer's Part Number + CAL D	Manufacturer's Part Number + CAL DU

^{*}For those parameters found out of tolerance

Standard Calibration (ANSI/NCSL Z540.1)

Services compliant with this standard provide a calibration certificate with a calibration date and due date. A traceability statement is also provided. Measurement parameters not meeting the test specifications (out of tolerance) are identified and reported on the certificate.

Standard Calibration with Data (Before/After Data)

Services compliant with this standard provide a calibration certificate with a calibration date and due date. Atraceability statement is also provided. Complete before/after measurement data is included, listing the test name, measured value, and test limits for each parameter tested during the calibration process.

17025 Accredited Calibration (with Uncertainties)

within our approved scape of accreditation. Accredited calibrations provide a certificate of calibration with the accredited calibrations provide a certificate of calibration with the accrediting body's logo on the document. The calibration date is on the certificate, calibration due date is only placed on the document when specified by the customer or contractually agreed upon. A traceability statement is also provided. Measurement data and uncertainty for each parameter tested during the calibration is included.

What else are you looking to customize? Click any of the below to find out how we can help.

Components	Raspberry Pis	Kits
Panel Meters	Connectors	Enclosures
Switches	Re-Reeling	Cable Services
Battery Packs	Calibration	Stockroom Solutions

