

#### Leading the field in feature innovation

Fluke has more experience than most infrared providers. Our design team has been on the job and in the field for thousands of hours with our thermography customers. Understanding our customers' pain points leads to the development of innovative features that work together to provide superior image quality. That's only one reason Fluke stands out from the competition.



**#1 Infrared Imaging/ Thermography** Readers' Choice Award Control 2015, 2016 and 2017

**Winner: TiX580** Engineers Choice Control Engineering 2016

**Product of the Year** Fluke Connect Assets Consulting-Specifying Engineer 2016

Product of the Year TiX560 – Cameras and Imaging category EC&M 2016

Winner: Product of the Year Fluke Connect Assets – Software – Maintenance mgmt. EC&M 2016

# The 7 secrets to better infrared image quality

#### Don't SETTLE. Obsess over image quality.

You've likely heard that the two most important things to a practicing thermographer are focus and image quality. Frankly, they often obsess over it—and rightfully so. Focus can't be corrected once you return from the inspection site and out-of-focus images put temperature accuracy at risk. Image quality is usually considered as camera resolution but it's so much more. Look beyond the resolution and the pixel count and you'll start seeing the difference right away.

## 7 innovations working together producing superior image quality

### No compromising to get the details

With infrared images, details can make all the difference in finding and identifying issues correctly. Don't settle for resolution that doesn't meet your needs, and take advantage of features that enhance images to provide greater detail.

- See more with 640 x 480 pistol grip and rotating screen cameras
- Get enhanced image quality and more accurate temperature measurements through a feature like SuperResolution – it doubles the standard resolution of your infrared camera (640 x 480 multiplies to 1280 x 960)









#### See things both ways to better identify and report problems quickly

Fluke IR Fusion<sup>®</sup> technology captures a digital and an infrared image at the same time, then precisely matches them pixel-by-pixel to see more detail in one image. Adjust the blend-ing of the image from 100 % infrared to 100 % digital and get just the right blend. The five modes of IR Fusion (Full IR, Picture-in-picture, Blending, Visible Alarm and Full Visible) give you the flexibility to generate an image that provides the best detail of the problem area and the exact location of the problem.



 $Challenging \ inspection \ sites, \ multiple \ layers \\ of \ components$ 



Passive auto focus systems may only capture near-field subject



Fluke LaserSharp Auto Focus captures an in-focus image of your target of choice, not the auto focus of the camera



### Its all about focus—get in focus images of your selected target with a touch of a button

LaserSharp<sup>®</sup> Auto Focus uses a built-in laser distance meter that pinpoints the target enabling the camera to capture a precisely focused, high quality image with the distance recorded in your image.

- Designed to give you instant focus under most conditions, an infrared technician of any level can work efficiently and confidently knowing they are capturing high quality images
- Equipment inspections behind chain link fences and other obstacles are no longer an issue because the laser pinpoints the desired target
- When looking at components at different distances in a panel or multiple motors at the same time, you want to be able to focus on what's important, not let some fixed or auto focus pick the focus point
- Repeatability is easy—the built in laser distance meter calculates and displays the distance to the target





Middleground in focus



Forground in focus



Background in focus

#### Multiple targets at different distances see everything at once

Go from being completely outof-focus to clear accurate and in focus throughout the field of view, simply point and shoot. MultiSharp<sup>™</sup> Focus takes multiple images from different focal distances and combines them into one clear image.

• Reduce the need to take multiple images of individual targets that are in the same field of view. Focus on one target, and press the MultiSharp



Clear, accurate and in focus throughout the field of view.

button and all objects within the field of view come into focus.

- Increase productivity by taking less images
- Don't worry about focus during daylight, MultiSharp allows you to capture quality, in-focus images in direct sunlight

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#### Quick and easy menu selection with responsive touchscreen display

- Responsive touch screens support multi-touch operations such as swipe and one-finger touch
- See more on-screen details with 640 x 480 color LCD display
- Interact and move through menu selections faster, capture images in less time
- Chemically strengthened glass displays that are thin, light, and scratch and crack resistant





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### Tie it all together and save time with software

Fluke Connect<sup>\*</sup> offers a software solution to manage data, incorporate measurements from other tools, create work orders and reports, using point-to-point Bluetooth or WiFi requiring no interaction with local networks.

Make maintenance decisions faster, send images to your team for collaboration and schedule maintenanceall from your smartphone without leaving the inspection site.



#### Extend the functionality of your camera

Infrared inspections can take you into multiple types of environments with many types of equipment. See the details that would be challenging to see with a standard lens. Interchangeable lenses that require no calibration give you the versatility and the image quality needed to conduct inspections in almost any environment. Telephoto, wide angle and macro lenses are 3 examples that can greatly enhance your viewing experience and camera's abilities.



Standard (left), 2x telephoto (center) and 4x telephoto (right)-see the right level of critical infrared detail

#### **Telephoto lenses**

Telephoto lenses are often the difference between finding and potentially diagnosing the problem, and not seeing any problem at all. Get the detail you need, even from a distance, when you view your target magnified 2 or 4 times more than a standard lens.





Standard lens (left) and wide lens (right) see both sides of the building at once from the same distance

#### Wide angle lenses

When working in a tight space, get a wide field of view that lets you see a larger target from a close distance. See an entire bank of switchgear cabinets in tight quarters, or see more components through an IR window. View the entire side of a building without getting too far away, or inspect roofs quicker than with a standard lens by viewing a much larger area at a time.



Standard (left) and 25 micron macro lens (right)—see detail in very small objects

#### **Macro lenses**

Get an incredibly detailed image of very small objects so you can gain insight into thermal buildup and dissipation on printed circuit boards, identify a faulty or undersized component, or potentially even pinpoint precise faulty locations on those components. See details as small as 25 microns, which is smaller than the average human hair.

Now that you know the secrets to superior infrared image quality, be sure to keep these in mind when searching for a thermal imager to meet your needs. Regardless of your application, you need a tried, trusted and tough camera with innovative features.

**Don't SETTLE. Obsess over image quality.** Learn more from your local Fluke representative. Fluke. Keeping your world up and running.®

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\* Not all features are available on all models. Check with your Fluke representative for more information.