

FLUKE®



**Meet the VT02 Visual IR Thermometer**

**SO ADVANCED, WE HAD TO  
CREATE A NEW CATEGORY**

A troubleshooting camera with an infrared heat map.

# SEE BEYOND TEMPERATURE

**The new VT02 Visual IR Thermometer bridges the gap between low cost IR thermometers and higher priced thermal imagers and allows you to see beyond temperature at a price that's equally groundbreaking.**

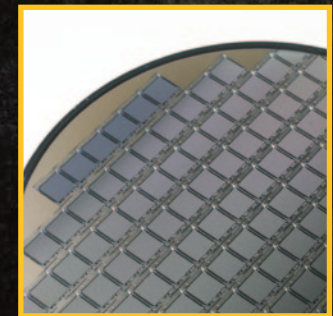
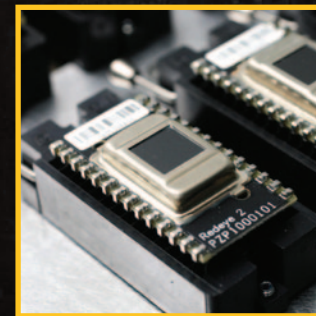
**Now, instead of the tedious tasks of taking and recording multiple, individual temperature readings, you get the complete picture with a blended visual and thermal image of your target area.**





## Hyper-thin pyroelectric technology leads to breakthrough affordability.

In the past, blending has been the exclusive territory of tools priced five to ten times higher, but not anymore. It's standard with your new Fluke VTO2 Visual IR Thermometer. And because the technology is so easy to use, it doesn't require any advanced training.



## The Fluke Visual IR Thermometer strikes the perfect balance between performance and affordability

It wasn't enough to create the features that make the VTO2 in a class of its own, we set out to make it uniquely affordable.

Hyper-thin pyroelectric innovation pushes the limit of IR technology pioneering an array dense enough to create an infrared blended heat map.

The result is the missing link—the ultimate in-between tool for those times when a single temperature reading isn't enough and a high-resolution thermal image is more than you need.

# 5 KEY BENEFITS

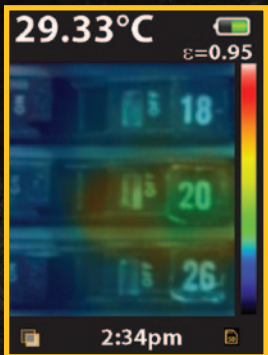


## MEASURE WITH CONFIDENCE

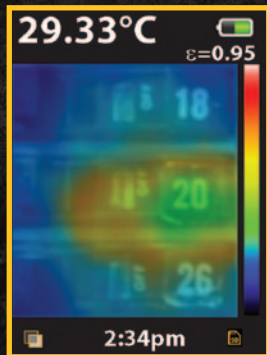
Traditional infrared thermometers only show an average temperature of an area that doesn't accurately identify what you are measuring. The VT02 gives you the visual image of exactly what you are measuring.

## Visual and thermal blending

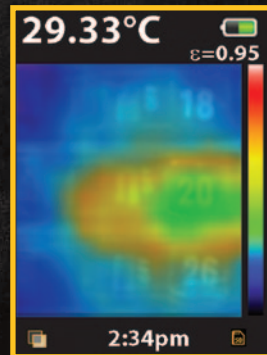
Until now, it hasn't been possible to combine the convenience of a digital camera with a thermal heat map at breakthrough affordability. Unlike other technologies, the blended image eliminates guesswork and tells you the exact location of the issue.



25 % visual



50 % blend



75 % blend



## DETECT ISSUES INSTANTANEOUSLY

Eliminate the task of taking multiple grid readings and manual temperature measurements. In one blended image, you get the complete picture and can compare readings from different dates.



**3** **PINPOINT WITH HOT AND COLD MARKERS**

A picture speaks a thousand words. The blended image of the VT02 captures a center point temperature measurement and hot and cold markers all at once with a click of a button. Pinpoint the exact location of potential problems faster and easier.

**4** **DOCUMENT PROBLEMS WITH SMARTVIEW® SOFTWARE**

Producing a professional report with Smartview® is just as powerful as the VT02. You will be able to communicate issues or document that repairs have been fixed.

**5** **TROUBLESHOOT EFFICIENTLY**

Compact and intuitive, the point and shoot focus-free design of the VT02 starts finding problems right out of the box with little to no training required.



# KEY APPLICATIONS

**USERS:** Industrial technicians • HVAC/R technicians • Electricians • Automotive technicians



## Industrial maintenance

Identify possible malfunctions by pinpointing hot spots and identifying wear conditions of equipment. Maintain optimum production efficiency and safety conditions.

- Motor starter relay contacts and overloads
- Pumps, bearings and windings
- Belts and drive shafts
- Electrical overloads and wiring issues
- Performance verifications



## Electrical

Eliminate the tedious tasks of taking multiple grid readings and manual recording of temperature readings. Show work was completed properly with saved images and professional reports.

- Check temperature of equipment and transformers
- Detect heating of fuses, wires, insulators, connectors, splices and switches
- Prevent overloaded motors due to possible harmonic currents



## HVAC/R

See beyond temperature with 25 %, 50 % and 75 % blended images that help you see potential issues faster and with more detail. Show work was completed properly with saved images and professional reports.

- Heating and cooling systems
- Troubleshoot failed bearing components
- Verify surface temperatures and calibrate zone temperatures



## Automotive

Detect blockages in heater cores and cooling systems. Diagnose automotive electrical issues. Determine failed bearing components quickly without the use of other less-efficient tools

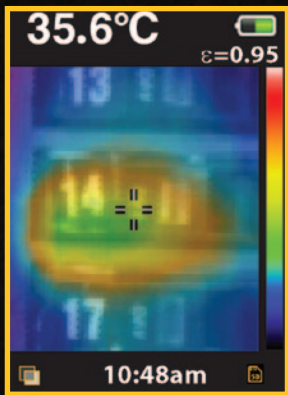
- Check engine, brakes and heating/cooling systems
- Performance verification
- Wiring, bearings and exhaust systems
- Hydraulics, compressor and seals

# VT02 revolutionizes temperature measurements with thermal blending



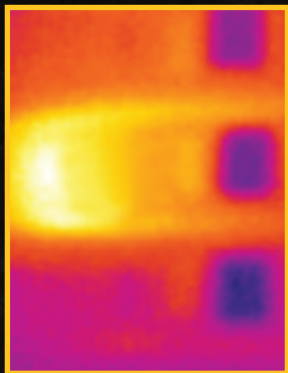
## Traditional IR thermometer

Optimized for single point measurements



## Visual IR thermometer

Visual and thermal blending provide context and instantly tells you the exact location



## Full infrared only thermal imagers

Challenging to see exact location without visual context

 [fluke.com/toolofthetrade](http://fluke.com/toolofthetrade)

## SmartView® software

### Document problems with SmartView® software—a brilliant way to sell yourself

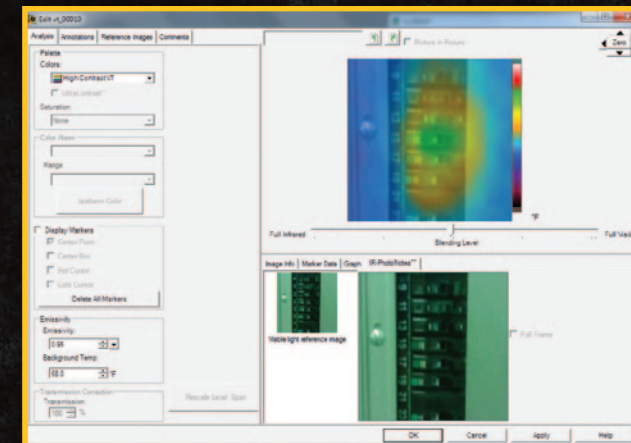
Producing a professional report with Smartview® software is just as powerful as the VT02 tool itself. You will be able to communicate the issues that you've detected or document repairs that have been fixed.

### Free upgrades. Free to share.

We don't charge you for software upgrades. They're free for the life of the product. We enable you to share this software with others.

### SmartView® software is the smart choice.

- Extensive annotation, editing, and viewing options
- Multiple reporting options and templates
- Enhance and analyze images quickly and easily
- Report Wizard guides you through automatic report generation
- Communicate image details with text annotation drag and drop feature
- Lifetime software upgrades, and no sharing limitations.



Sample SmartView® software view

# SPECIFICATIONS

<b>Temperature</b>	
Temperature measurement range	-10 °C to +250 °C (14 °F to 482 °F)
Temperature measurement accuracy	± 2 °C or ± 2 % of reading in °C, whichever is greater (at 25 °C nominal), as tested
<b>Imaging performance</b>	
Detector type	Uncooled hyper-thin pyroelectric ceramic
Infrared spectral band	6.5 µm to 14 µm
Field of view	20° X 20°
<b>Image presentation</b>	
Level and span	Auto
Viewing options	Blending of the visual and the infrared from full infrared to full visual in 25 % steps.
<b>Image capture and data storage</b>	
Storage medium	4 GB micro SD card.
File format	.is2 format saved to SD card. When imported to included SmartView® reporting software, user can create professional reports or images can be exported into multiple formats (BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF AND TIFF)
Memory review	Scroll through all saved images and view on screen.
<b>General specifications</b>	
Operating temperature	-10 °C to +45 °C (14 °F to 113 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to 140 °F)
Relative humidity	10 % to 90 % non-condensing
Display	2.2 in diagonal
Controls and adjustments	Select color palette User selectable temperature scale (°F/°C) Time/date set Emissivity selection
Software	SmartView® analysis and reporting software, included
Power savings	Power down after 10 minutes of inactivity.
Electromagnetic compatibility	CE / EN61326-1:2006
US FCC	CFR47: 2009 Class A. Part 15 subpart B.
Size (H x W x L)	21 cm x 7.5 cm x 5.5 cm (8.3 in x 3 in x 2.2 in)
Weight (battery included)	< 300 gm (10.5 oz)
Warranty	2 years

**Fluke Corporation**  
PO Box 9090, Everett, WA 98206 U.S.A.

**Fluke Europe B.V.**  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

Modification of this document is not permitted without written permission from Fluke Corporation.

**For more information call:**  
In the U.S.A. (800) 443-5853 or  
Fax (425) 446-5116  
In Europe/M-East/Africa +31 (0) 40 2675 200 or  
Fax +31 (0) 40 2675 222  
In Canada (800)-36-FLUKE or  
Fax (905) 890-6866  
From other countries +1 (425) 446-5500 or  
Fax +1 (425) 446-5116  
Web access: <http://www.fluke.com>

©2012 Fluke Corporation.  
Specifications subject to change without notice.  
Printed in U.S.A. 10/2012 4272478A\_EN