









Grainger Reference Catalog





Fluke Connect® Wireless Tools

Infrared Cameras

Ti200 a3001 FC iFlex® Kit	31FN06
Ti200 Infrared Camera	23NT31
Ti300 a3001 FC iFlex® Kit	31FN05
Ti300 Infrared Camera	23NT32
Ti400 a3001 FC iFlex® Kit	31FN04
Ti400 Infrared Camera	23NT33
TiR105 Infrared Camera	42X236
TiR110 Building Diagnostic Infrared Camera	13T381
TiS10 Infrared Camera	44ZC52
TiS20 Infrared Camera	40PC42
TiS40 Infrared Camera	40PC43
TiS45 Infrared Camera	40PC44
TiS50 Infrared Camera	40PC45
TiS55 Infrared Camera	40PC46
TiS60 Infrared Camera	40PC47
TiS65 Infrared Camera	40PC48
TiS75 Infrared Camera	46MN75
TiX520 Infrared Camera	38RX05
TiX560 Infrared Camera	38RX06
TiX500 Infrared Camera	45PC80

Digital Multimeters

287 True-rms Electronics Logging Multimeter	1EVC6
289 True-rms Industrial Logging Multimeter	1EVC3
3000 FC Series Wireless Multimeter	31FN10
3000 FC Industrial System	31FN13
1587 FC Insulation Multimeter	45ZA03

Current Meters

902 FC True-rms HVAC Clamp Meter	48RH39
a3000 FC Wireless AC Current Clamp Meter	31FN14
a3001 FC Wireless iFlex® AC Current Meter	31FN16
a3002 FC Wireless AC/DC Current Meter	31FN24
a3003 FC Wireless 2000 A DC Current	40KJ07
Clamp Meter	
a3004 FC Wireless 4-20 mA DC Clamp Meter	40KJ08
t3000 FC Wireless K-Type Temperature Meter	31FN19
v3000 FC Wireless True-rms AC Voltage Meter	31FN21
v3001 FC Wireless DC Voltage Meter	31FN25
376 FC Wireless True-rms AC/DC Clamp Meter	45MU54
375 FC True-rms AC/DC Clamp Meter	45MU55
374 FC True-rms AC/DC Clamp Meter	45MU56

Vibration Meter

805 FC Vibration Meter	39UL62
Process Tools	
789 ProcessMeter™	3MU89

32MX51

Accessories

ir3000 FC Connector

pc3000 FC Wireless PC Adapter	31FN18
ScopeMeters	
120B Series Industrial ScopeMeter® Hand-Held Oscilloscopes	48JP64, 48JP65, 48JP66, 48JP67, 48JP68, 48JP69

All the facts, right in the field. Save time and money with Fluke Connect®.



Fluke Connect®, the largest system of software and wireless test tools in the world.

The Fluke Connect system of wireless tools helps you:

Increase the safety of your team. Reduce your team's exposure to safety hazards such as arc flashes and running motors by connecting tools to your equipment that allow you to transmit measurements wirelessly.

Save time and money and increase productivity by creating reports in the field and sending them to any team member's smartphone or computer for collaborative troubleshooting.

The growing system of Fluke Connect wireless tools includes:

- Infrared cameras
- Vibration meters
- Digital multimeters
- Current meters
- · Voltage meters

Learn more at grainger.com/flukeconnect



Fluke infrared tools are on the job because they do the job.



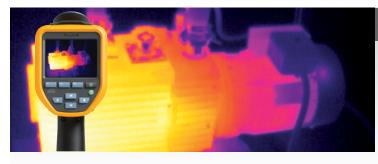
Expert Series

When you cannot be wrong, the Expert Series offers extremely detailed images. Plus, view images on a large articulating display—up to 5.7 inches.



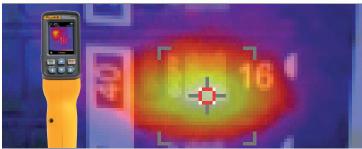
Professional Series

Focus with laser speed and accuracy on your designated target with LaserSharp® Auto Focus. Get highly detailed images and advanced features.



Performance Series

Get detailed images in an affordable infrared camera that's rugged and reliable. The perfect tool for a quick inspection.



Visual IR Thermometer

An infrared heat map with hot and cold markers reveals potential areas of concern. See issues in context by blending the heat map with a visual image.



IR Thermometer

Get a quick temperature reading, even from a distance, with up to a 60:1 distance to spot ratio and a start-up time of a mere second.

Choose the right infrared camera for the job.

Get the infrared cameras that are built on 65+ years of industrial experience. Each camera is built without compromise to the Fluke standard of "ruggedness, reliability and accuracy". Designed for everyday use, in any environment for thorough and accurate inspections.

Expert series

Professional series

Best for

Applications

Engineers, R&D professionals and advanced thermographers who require premium image quality and an unsurpassed level of detail in every infrared image.

Professional in-house, contract and service thermographers who need quality images and advanced features and specifications for use in multiple applications.

- Industrial maintenance
- Generation/transmission
- Oil and gas predictive maintenance
- Research and development
 - Electrical
- Mechanical
- Biology/sciences
- Quality control
- Plus the industries included under the professional and performance series

- Industrial maintenance
- · Heavy commercial facility maintenance
- Oil and gas maintenance
- Veterinary
- Reliability inspections
- Heavy building diagnostics
 - Building envelope
 - Construction defects
- Electrical, water, gas utilities
- Machinery, instrumentation and appliances
- Plus the industries included under the performance series









	TiX560	TiX520	TiX500	Ti400	Ti300	Ti200
Grainger SKU	38RX06	38RX05	45PC80	23NT33	23NT32	23NT31
Detector resolution	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240, 640 x 480 Super Res.	320 x 240	240 x 180	200 x 150
Spatial resolution	1.31 mRad	1.31 mRad	1.31 mRad	1.31 mRad	1.75 mRad	2.09 mRad
Field of view	24° x 17°	24° x 17°	24° x 17°	24° x 17°	24° x 17°	24° x 17°
Distance to spot	753:1	753:1	753:1	753:1	565:1	470:1
Thermal sensitivity	50 mK	50 mK	50 mK	50 mK	50 mK	75 mK
Temperature range	-20 °C to +1200 °C (-4 °F to +2192°F)	-20 °C to +850 °C (-4 °F to +1562°F)	-20 °C to +650 °C (-4 °F to +1202 °F)	-20 °C to +1200 °C (-4 °F to +2192°F)	-20 °C to +650 °C (-4 °F to +1202°F)	-20 °C to +650 °C (-4 °F to +1202°F)
Focus systems	LS, AMF	LS, AMF	LS, AMF	LS, AMF	LS, AMF	LS, AMF
Laser distance meter	•	•	•	•	•	•
Image enhancement	IRF, SR, IS	IRF, SR	IRF, SR	IRF	IRF	IRF
Annotation	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA, TA	IRPN, VA	IRPN, VA
Standard video rec.	•	•	•	•	•	•
Radiometric video rec.	•	•	•	•	•	•
Optional lenses	•	•	•	•	•	•
Fluke Connect enabled	•	•	•	•	•	•

AMF: Avanced manual focus | FF: Fixed Focus | IRF: IR Fusion® Auto Blend | IRPN: IR-PhotoNotes™ | IS: Image Sharpening | LS: LaserSharp. Auto Focus System | MF: Manual focus | SR: SuperResolution | TA: Text Annotation | VA: Voice Annotation |



Choose from the affordable and versatile Performance Series, the Professional Series that offers superior image quality, or the Expert Series that gives you up to HD images on the industry's largest screen. All Fluke infrared cameras include Fluke Connect® and SmartView® software for data sharing, storage, in-depth analysis and reporting.

Performance series

Technicians and contractors who need quality images and feature rich affordability for quick scans and/or intermittent inspections.

- Electrical inspections
- HVACR inspections
- Mechanical
- Residential home inspections
- Light commercial maintenance
- Building diagnostics
 - Building envelope
 - Commercial/industrial facilities



TiS75	TiS65	TiS60	TiS55	TiS50	TiS45	TiS40	TiS20	TiS10
46MN75	40PC48	40PC47	40PC46	40PC45	40PC44	40PC43	40PC42	44ZC52
320 x 240	260 x 195	260 x 195	220 x 165	220 x 165	160 x 120	160 x 120	120 x 90	80 x 60
2.0 mRad	2.4 mRad	2.4 mRad	2.8 mRad	2.8 mRad	3.9 mRad	3.9 mRad	5.2 mRad	7.8 mRad
35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°	35.7° x 26.8°
504:1	409:1	409:1	346:1	346:1	252:1	252:1	189:1	126:1
80 mK	80 mK	80 mK	80 mK	80 mK	90 mK	90 mK	100 mK	150 mK
-20 °C to +550 °C (-4 °F to 1022 °F)	-20 °C to +550 °C (-4 °F to 1022 °F)	-20 °C to +550 °C (-4 °F to 1022 °F)	-20 °C to +450 °C (-4 °F to 842 °F)	-20 °C to +450 °C (-4 °F to 842 °F)	-20 °C to +350 °C (-4 °F to 662 °F)	-20 °C to +350 °C (-4 °F to 662 °F)	-20 °C to +350 °C (-4 °F to 662 °F)	-20 °C to +250 °C (-4 °F to 482 °F)
MF	MF	FF	MF	FF	MF	FF	FF	FF
IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF, PIP	IRF	
IRPN, VA	IRPN, VA	IRPN, VA	IRPN, VA	IRPN, VA	VA	VA		
•	•	•						
•	•	•						
•	•	•	•	•	•	•	•	•

Meters designed for the way you work

Best for	Advanced ind	ustrial meters	Industrial and electrical meters			
	120.12 W	1999B 1	4603			
	289	87V	3000 FC	179		
Grainger SKU	1EVC3	4EB18	4EB18	6MR09		
Applications	Working on VSDs/VFDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals. Graphing: View logged values graphically in the field right on the meter, without a PC. Logging: For unattended monitoring of signals over time, to detect intermittent problems. Testing motor windings or contact resistance: Allows testing of resistance up to 50 ohms with one milliohm (0.001 ohm) resolution.	Working on VSDs/VFDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals. Industrial troubleshooting: All of the resolution and accuracy you need to solve more problems on motor drives, in-plant automation, power distribution, and electromechanical equipment. Checking power quality: Capture glitches and spikes as short as 250 µs. Identify irregular signals.	Work faster and safer with Fluke Connect (FC) wireless test tools: The 3000 FC wireless multimeter and associated wireless modules allows users to work safer, log time stamped readings, be in two places at once and see multiple readings simultaneously to solve complex electrical problems faster. Build the system as your needs grow: Start with the multimeter and expand your measurement and troubleshooting capabilities by adding additional meters to meet your specific applications including three-phase load studies with iFlex or voltage monitoring.	Electrical maintenance and troubleshooting: Variety of commercial electrical troubleshooting, installation and maintenance. Temperature measure- ments: Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument.		
Basic features						
Counts	50,000	20,000	6,000	6,000		
True-rms readings	ac+dc	ac	ac	ac		
Basic dc accuracy	0.025%	0.05%	0.09%	0.09%		
Wide bandwidth	100 kHz	20 kHz	3.30 %	3.30 %		
Auto/manual ranging	•/•	•/•	•/•	•/•		
Fluke Connect® enabled			•			
Measurements						
Voltage ac/dc	1000 V	1000 V	1000 V	1000 V		
Current ac/dc	10 A	10 A	400 mA	10 A		
Resistance	500 MΩ	50 MΩ	50 MΩ	50 MΩ		
Frequency	1 MHz	200 kHz	100 kHz	100 kHz		
Capacitance	100,000 μF	10,000 μF	10,000 μF	10,000 μF		
Temperature	(+) 1350 °C	(+) 1090 °C	(with t3000 FC*)	(+) 400 °C		
Insulation test voltages						

Pi/DAR timed ratio tests

^{*}Fluke Connect-enabled: Wirelessly relay data with Fluke Connect $^{\otimes}$. These meters can be used as a stand-alone tool or as part of the Fluke Connect system.

Electrical and HVAC meters

Specialty meters











1GAJ2

116 1GAJ1

28 II 4GUE4 1587 FC* 45ZA03

Electrical maintenance troubleshooting: When you need to eliminate false or "ghost" voltages or perform continuity, connection or basic wiring

Non-contact voltage detection: Integrated non-contact voltage detection simplifies many tasks.

Residential HVAC maintenance: Lower voltage HVAC residential maintenance, installation and troubleshooting.

Temperature and microamp measurements: Troubleshooting problems with HVAC equipment and flame sensors.

Electronic troubleshooting: Troubleshoot a wide variety of measurement parameters, including frequency and capacitance.

1GAH9

Industrial troubleshooting in indoor and outdoor harsh environments: Dustproof, waterproof, shockproof multimeter designed to withstand the toughest environments.

Working on VSDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals.

Combine a digital insulation tester with a full-featured, true-rms digital multimeter in a single, compact, handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.

Industrial troubleshooting: Whether you work on motors, generators, cables, or switch gear, the Insulation Multimeters is ideally suited for predictive and preventive maintenance measurement tasks in electrical and industrial applications. Polarity Index (Pi) and Dielectric Absorption Ratio (DAR) tests identify problems faster.

6,000	6,000	6,000	20,000	6,000
ac	ac	ac	ac	ac
0.5%	0.5%	0.5 %	0.05%	0.09%
			20 kHz	5 kHz
•/•	•/•	•/•	•/•	•/•
				•
600 V	600 V	600 V	1000 V	1000 V
10 A	600 μA	10 A	10 A	400 mA
40 MΩ	40 MΩ	40 MΩ	50 MΩ	50 MΩ
100 kHz	100 kHz	100 kHz	200 kHz	100 kHz
10,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF
	(+) 400 °C		(+) 1090 °C	(+) 537 °C
				50, 100, 250, 500, 1000 V
				•

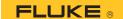
Clamp meter selection guide

Best for	Resider	ntial/commercial el	ectrical	General purpose			
	323	324	325	365	373	374 FC	
Grainger SKU	20E890	20E891	20E892	6ГХН8	6ГХН7	45MU56	
Measurements							
AC current	•	•	•	•	•	•	
AC voltage	•	•	•	•	•	•	
Resistance	•	•	•	•	•	•	
Continuity	•	•	•	•	•	•	
DC volts	•	•	•	•	•	•	
DC current			•	•		•	
True-rms	•	•	•	•	•	•	
Frequency			•				
AC + DC voltage							
AC + DC current							
Min/Max/Avg			•			•	
4-20 mA (0.01 mA resolution)							
Temperature		•	•				
Capacitance		•	•		•	•	
Measurement logging							
Special features							
Inrush current mode						•	
Low Pass filter							
Harmonics, power, data logging							
18-inch iFlex Flexible Current Probe						Optional	
10-inch iFlex Flexible Current Probe						Optional	
Remote display							
Fluke Connect® enabled						•	
Display						ı	
Display hold	•	•	•	•	•	•	
Backlight		•	•	•	•	•	
Graphing display							
Specifications							
Current range ac rms	0 to 400.0 A	0 to 40.00 A/ 400.0 A	0 to 40.00 A/ 400.0 A	0 to 200.0 A	0 to 600.0 A	0 to 600.0 A	
AC response	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	
Current range dc			0 to 40.00 A/ 400.0 A	0 to 200 A		0 to 600.0 A	
Voltage range ac	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	
Voltage range dc	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	
Resistance range	0 to 4000 Ω	0 to 4000 Ω	0 to 40 kΩ	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω	
Frequency measurement range			5 Hz to 500 Hz				
Warranty and safety							
Warranty (years)	2	2	2	3	3	3	
Category ratings (EN61010-1)	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT III 600 V	CAT III 600 V, CAT IV 300 V	CAT III 1000 V, CAT IV 600 V	

General	General purpose Industrial electrical		electrical	HVAC/R	High end industrial, utility		Leakage
					2007	2005	
375 FC	a3000 FC	376 FC	381	902 FC	353	355	360
45MU55	31FN14	45MU54	6ГХНЗ	48RH39	2FTY8	2FTY9	1CWL7
Measurements							
•	•	•	•	•	•	•	•
•		•	•	•		•	
•		•	•	•		•	
•		•	•	•		•	
•		•	•	•	•	•	
•	•	•	•	•	•	•	
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						•	
_		•	•		•	•	
•		•	•	•	•	•	
				•			
•		•		•			
•	•	•					
Special features							
•	•	•	•		•	•	
•		•	•		•	•	
Optional		Included	Included				
Optional		Optional	Optional				
Optional	in phone ann	Optional	Optional				
Optional •	in phone app	Optional •	Optional •	•			
			-	·			
•			-	•	•	•	•
• Display	in phone app	٠	-	•	·	·	•
• Display •	in phone app	٠	-	•	·	·	•
Display Output Specifications	in phone app in phone app	:	•	÷	• •	• •	•
Display Specifications O to 600.0 A	in phone app in phone app 0 to 400A	• • • O to 999.9 A	• • • 0 to 999.9 A	• • 0 to 600.0 A	• • • 0 to 1400 A	0 to 1400 A	0 to 60 A
Display Specifications O to 600.0 A True-rms	in phone app in phone app	• • • 0 to 999.9 A True-rms	• • • 0 to 999.9 A True-rms	O to 600.0 A	True-rms	True-rms	•
Display Specifications O to 600.0 A True-rms O to 600.0 A	in phone app in phone app 0 to 400A	0 to 999.9 A True-rms 0 to 999.9 A	0 to 999.9 A True-rms 0 to 999.9 A	• • 0 to 600.0 A True-rms 0 to 200 μA		True-rms O to 2000 A	0 to 60 A
Display Specifications O to 600.0 A True-rms O to 600.0 A O to 600.0 V	in phone app in phone app 0 to 400A	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V	• 0 to 600.0 A True-rms 0 to 200 μA 600.0 V	True-rms	True-rms 0 to 2000 A 0 to 600.0 V	0 to 60 A
Display Oto 600.0 A True-rms Oto 600.0 A Oto 600.0 V Oto 600.0 V	in phone app in phone app 0 to 400A	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V	• 0 to 600.0 A True-rms 0 to 200 μA 600.0 V 0 to 600.0 V	True-rms	True-rms 0 to 2000 A 0 to 600.0 V 0 to 1000 V	0 to 60 A
• Display • • • • • • • • • • • • • • • • • • •	in phone app in phone app 0 to 400A	• 0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V 0 to 60 kΩ	• 0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V 0 to 60 kΩ	• 0 to 600.0 A True-rms 0 to 200 μA 600.0 V	True-rms O to 2000 A	True-rms O to 2000 A O to 600.0 V O to 1000 V O to 400 KΩ	0 to 60 A
• Display • • • • • • • • • • • • • • • • • • •	in phone app in phone app O to 400A True-rms	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V	0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V	• 0 to 600.0 A True-rms 0 to 200 μA 600.0 V 0 to 600.0 V	True-rms	True-rms 0 to 2000 A 0 to 600.0 V 0 to 1000 V	0 to 60 A
• Display • • • • • • • • • • • • • • • • • • •	in phone app in phone app O to 400A True-rms	• 0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V 0 to 60 kΩ	• 0 to 999.9 A True-rms 0 to 999.9 A 0 to 1000 V 0 to 1000 V 0 to 60 kΩ	• 0 to 600.0 A True-rms 0 to 200 μA 600.0 V 0 to 600.0 V	True-rms O to 2000 A	True-rms O to 2000 A O to 600.0 V O to 1000 V O to 400 KΩ	0 to 60 A

Power quality and energy tools selection guide

Best for		Single-Phase				Three-Phase		
						1743/	.	Tax man
Grainger SKU	VR1710 2RUJ8	345 1FBK2	43B 1RH78	1730 29TJ21	1735 1FBK3	1744 1FYC8/	434-II 12Y315	1750 2VZJ3
, and the second	ZNUJO	IFBRZ	INHIO	291321	IFBRS	1FYC9	121315	2023
Energy studies Get detailed power and ene	ergy consumption	n profiles during	energy audits a	nd pinpoint savi	ings opportunitie	es		
Measure V, I, kW, Cos/DPF, kWhr		•	•	•	•	•	•	•
Measure MIN/MAX and AVG values		•	•	•	•	•	•	•
10 day logging		•	•	•	•	•	•	•
Waste energy monetization							•	
Basic harmonics study Discover the source of disto	rtion in your ins	tallation, so that	you can filter tl	nose loads or mo	ve them to sepa	rate circuits		
THD measurement (V & I)	•	•	•	•	•	•	•	•
Harmonics 1 to 25 for V & I	• (V only)	•	•		•	•	•	•
Advanced harmonics stud If distorting loads are causi		our installation,	you need comp	rehensive data to	o identify the so	urce and create	a solution	_
Full harmonic spectrum					•	•		•
Power harmonics		•	•				•	•
Basic industrial PQ trouble When troubleshooting in th		ıl data enables y	ou to trace the s	ource of the prol	blem at hand			
Oscilloscope function		•	•					•
Voltage dips and swells	•		•		•	•	•	•
Advanced industrial PQ tre		r dive into meas	urement data. M	ultiple loads ma		randomly to cau	ise a single prob	lem
Comprehensive logging capability		•	•			•	•	•
Transient capture	•		•				•	•
Flicker	•					•	•	•
Features								
Measures voltage, current, dips, swells, interruptions, inrush harmonics, power, energy loss monetization, frequency, and power inverter efficiency								
Flicker							•	
Transients							•	
Mains signaling							•	
Power wave							•	
Event waveform capture							•	
400 Hz							•	
C1740 Soft Case							•	
C437-II Hard Case with rollers							•	
SD card (Max 32 GB)							•	



Visual Infrared Thermometers

Fluke VT04/VT04A Visual IR Thermometer: Designed to see it all

See issues in context by blending the infrared heat map with a visual image, and get the detail you need by choosing one of five on-screen blending modes. See aligned images from as close as 15 cm (6 in) in near mode or from a distance in far mode. Plus, obtain accurate temperature readings without taking your eyes off the screen. The center measurement box shows the exact area of temperature measurement. Fill that center box with your target and rest assured you're not measuring the background.



	V102	V104	V104A
Grianger SKU	42X216	29TJ14	31FM96
Built-in digital camera	•	•	•
Infrared heat map overlay	Yes (five blending modes)		
Image optics system	PyroBlend™ optic PyroBlend™ Plus optic, 4 x sharper image		ic, 4 x sharper image
Center-point temperature measurement	•	•	•
Field of view	20° x 20°	28° x 28°	28° x 28°
Battery (8 hours)	4 AA batteries	VTO4: Li-Ion rechargeable	VTO4A: Four (4) AA batteries
Temperature alarms		•	•
Temperature range	-10 °C to +250 °C (14 °F to 482 °F)		
Temperature measurement accuracy	± 2 °C or ± 2 %		
Compact, intuitive, and focus free	•	•	•
SD card (4 GB included)	Yes —up to 9,999 images		
Professional reporting SmartView® software	Free download from Fluke website. www.fluke.com/vtsmartview		

Fluke CV400/401/300/301/200/201 IR Windows

Increase the safety and speed of your electrical infrared inspections

A company's greatest investment is not the equipment that's behind the panel door. It's the electricians, engineers and inspectors who risk their lives every day doing their jobs.

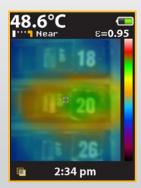
- Highest arc blast safety rating available-63 kA when properly installed
- Under five minute installation with one person; no need to remove panel door
- \bullet Available in 4 inch (95 mm), 3 inch (75 mm) and 2 inch (50 mm) sizes with convenient 1/4 turn access or security key access options
- Clearly view equipment both visually and thermally with ClirVu® coating that protects the optic from the elements
- Corrosion and UV resistant for challenging outdoor environments—IP67 rugged

Ordering information

•		
Models	Grainger SKU	Description
CV400	23NT25	4 in (95 mm) IR Window, Hand Turn Door Latch
CV401	23NT26	4 in (95 mm) IR Window, Security Key Door Latch
CA300	23NT23	3 in (75 mm) IR Window, Hand Turn Door Latch
CV301	23NT24	3 in (75 mm) IR Window, Security Key Door Latch
CV200	23NT21	2 in (50 mm) IR Window, Hand Turn Door Latch
CV201	23NT22	2 in (50 mm) IR Window, Security Key Door Latch



25 % heat map



50 % heat map



75 % heat map

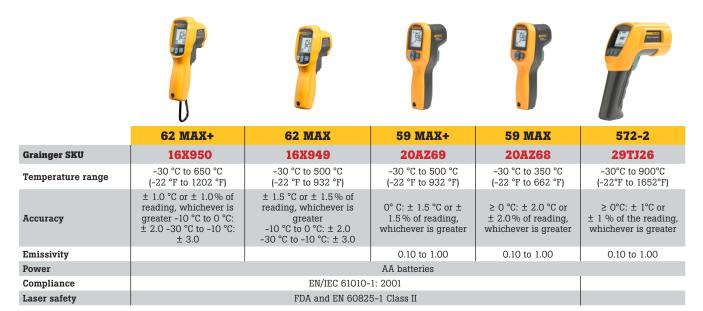
Fluke IR-Windows enable you to inspect electrical equipment without opening panel doors.



Infrared Thermometers

Take measurements from a safe distance

Fluke has built infrared thermometers with the durability and accuracy you need to do your job, and all within your budget. These IR Thermometers offer precise laser technology for accurate and repeatable measurements.



Stand up to tough industrial, electrical, HVAC, and mechanical environments

With a straight-forward user interface and soft-key menus, the Fluke 560 Series IR Thermometers make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, record data, or turn on and off alarms.







	Fluke 561	Fluke 566	Fluke 568
Grainger SKU	1PEK8	2DPJ1	2DPJ2
Infrared temperature range	-40 °C to 535 °C (-40 °F to 995 °F)	-40 °C to 650 °C (-40 °F to 1202 °F)	-40 °C to 800 °C (-40 °F to 1472 °F)
Accuracy		Greater of ± 1 % or ± 1 °C (2 °F)	
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)
Probe type		Thermocouple K	
Contact temperature range	-40 °C to 550 °C (-40 °F to 1022 °F)	-270 °C to 1372 °C (-454 °F to 2501 °F)	
Number of on-board memory locations		20	99
PC download and software			Yes, with FlukeView® Forms
Soft-key feature menu navigation		•	
Min/Max/Avg/Dif	Min/Max/Dif	Min/Max/Avg/Dif	
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
High and low alarms		High and low alarms	
Hands-free logging			•



Indoor Air Quality Tools

Fluke 971 Temperature Humidity Meter (SKU 5YE63)

The Fluke 971 is invaluable for facility maintenance and utility technicians, HVAC-service contractors, and specialists who assess indoor air quality (IAQ). The Fluke 971 the perfect tool for monitoring problem areas. It is built to perform and made to last.

Functions	Measurements	
Temperature range	-20 °C to 60 °C (-4 °F to 140 °F)	
Relative humidity range	5% to 95%	
Temperature update rate	500 ms	
Temperature sensor type	NTC	
Response time (humidity)	For 90 % of total range - 60 sec. with 1 m/s air movement	
Humidity sensor	Electronic capacitance polymer film sensor	



Fluke 985 Airborne Particle Counter (SKU 20Z194)

The Fluke 985 Particle Counter is ideal for troubleshooting and monitoring indoor air quality issues and verifying HVAC filter performance in critical locations, and is the perfect tool for the maintenance, HVAC, and IAQ professional.

Functions	Measurements
Flow rate	2.83 L/min (0.1 cfm)
Light source	775 nm to 795 nm, 90mW class 3B laser
Count modes	Raw counts, #/m3, #/ft3, #/liter in Cumulative or Differential mode
Counting efficiency	$50~\%~@~0.3~\mu m;~100~\%$ for particles > 0.45 μm (per ISO 21501)
Zero count	1 count/5 minute (JIS B9921)
Concentration limits	10 % at 4,000,000 particles per ft3 (per ISO 21501)
Sample inlet	Isokinetic probe
Operating environment	10 °C to 40 °C (50 °F to 104 °F)/< 95 % non-condensing relative humidity



Fluke 975 AirMeter™: Simple, all-in-one air diagnostics (SKU 1AYG6)

The Fluke 975 AirMeter™ combines five powerful air quality tools into one.

	Range	Display resolution	Accuracy
Temperature	-20 °C to 50 °C (-5 °F to 122 °F)	0.1 °C (0.1 °F)	± 0.9 °C/± 1.62 °F from 40 °C to 60 °C ± 0.5 °C/± 1.00 °F from 5 °C to 40 °C ± 1.1 °C/± 1.98 °F from -20 °C to 5 °C
Relative humidity	10% to 90% RH non-condensing	1 %	± 2 % RH (10 % RH to 90 % RH)
Air velocity	50.0 fpm to 3000 fpm 0.25 m/ sec to 15 m/sec	1 fpm (0.005 m/ sec)	± 4% or 4 fpm* ± 4% or 0.02 m/sec* whichever is greater * Accuracy specification only valid for velocity readings above 50 fpm
CO ₂	0 ppm to 5000 ppm	1 ppm	Warm up time 1 min (5 minutes for full specification) 2.75% + 75 ppm
CO	0 ppm to 500 ppm	1 ppm	\pm 5% or \pm 3 ppm, whichever is greater, @ 20 °C and 50% RH



Fluke 922 Airflow Meter/Micromanometer (SKU 1CWL5)

The Fluke 922 makes your job easier by combining differential pressure, airflow and velocity into a single, rugged meter.

	Range	Accuracy	
Air pressure	± 4000 Pascals/± 16 in H ₂ O/± 400 mm H ₂ O/ ± 40 mbar/± 0.6 PSI	± 1% + 1 Pascal/± 1% + 0.01 in H ₂ 0/ ± 1% + 0.1 mm H ₂ 0/± 1% + 0.01 mbar/ ± 1% + 0.0001 PSI	
Air velocity	250 fpm to 16,000 fpm (1 to 80 m/s)	± 2.5% of reading at 2000 fpm (10.00 m/s)	
Air flow (volume)	0 to 99,999 cfm; 0 to 99,999 m 3/hr; 0 to 99,999 1/s	Accuracy is a function of velocity and duct size	
Temperature	0 °C to 50 °C (32 °F to 122 °F)	0.1 °C (0.1 °F)	
Data storage	99 readings		



Vibration Testing Equipment and Laser Alignment Tools



When vibration increases beyond normal levels, it may be a sign of alignment issues or source of trouble and you need fast and actionable answers. Fluke Vibration Testing and Laser Shaft Alignment Equipment and Systems were designed specifically for maintenance professionals who need to quickly perform vibration analysis and evaluate alignment to understand the root cause of equipment condition.

Use the 805 FC Vibration Meter (SKU 39UL62) to:

- Five tools in 1: overall vibration, bearing impacting, temperature, machine health severity, bearing health severity
- Four-level severity scale assesses urgency of vibration problems. Vibration measurement for acceleration, velocity and displacement units of measurement

Use the 810 Vibration Tester (SKU 5AER8) to:

- · Easily determine the root cause, location and severity of common mechanical faults
- Efficiently prioritize and plan equipment repair or replacement



Using a Fluke vibration meter or tester with the Fluke Connect® app, you can share inspection results and authorize next steps from the field, organize your measurements by asset in one location with EquipmentLog™ history, and securely connect and collaborate with others, so they can see what you see with ShareLive™ video call.





Fluke 789 ProcessMeter is two tools in one, a CAT IV 600V safety rated DMM and a full functioning mA loop calibrator. Perfect for instrumentation and I and E technicians

Process calibrator multimeters

Combine the functionality of a loop calibrator with the power of a digital multimeter

Fluke 789 ProcessMeter™ (SKU 3MU89)

The Fluke 789 ProcessMeter is the ultimate troubleshooting tool for process technicians. Add the wireless data logging capabilities of Fluke Connect® with ShareLive™ video call, and process technicians can do a lot more while carrying a lot less.

- · Unique new wireless measurement logging capability
- Temperature measurement from -200 °C to 1372 °C using the t3000 FC Module
- 24 V loop power supply
- HART mode setting with loop power (adds 250 ohm resistor)
- 20 mA drive into 1200 ohms
- 0% to 100% mA Span Check buttons to toggle between 4-20 mA
- Infrared I/O serial port compatible with FlukeView® Forms Software

Fluke 787 ProcessMeter™ (SKU 4KF01)

- Simultaneous mA and % of scale readout on mA output
- 25 % Manual Step plus Auto Step and Auto Ramp on mA output
- Min/Max/Avg/Hold/Relative modes



Prevent downtown and realize cost savings with Fluke

How much does unexpected downtime cost your facility per minute, hour or day? Fluke tools can play a pivotal role in helping you identify equipment issues before they become problems and avoid costly delays.

By measuring key indicators on critical equipment and sharing that data immediately, you can discover impending failures and schedule maintenance. With connected wireless tools, Fluke Connect® lets you identify and collaborate on problems quickly and confidently, while sharing your data when you want and with whom you want.



376 FC (SKU 45MU54)



measurements by asset on location with the AutoRecord™ Plus feature in the Fluke Connect Assets software.







(SKU 38RX06)

Fluke tools engineered for safety

Fluke tools are rigorously tested and have the highest safety category ratings to match your different work environments. Whether you work with electrical systems, motors and machinery or any of the many other professional jobs, our tools are engineered for safety. From digital multimeters to infrared cameras and IR windows to tracking measurements remotely, you can trust Fluke. Our new Fluke Connect® app and wireless enabled tools allow you to capture measurements up to 20 meters away from energized lines and moving machinery. You can safely troubleshoot issues and share the results with your team, anywhere, any time.



Fluke's comprehensive line of digital multimeters, electrical power analyzers, thermal imagers, insulation resistance testers, accessories, plus the integrated ScopeMeter® handheld test tools, are used by service technicians, plant engineers and installation and maintenance technicians.



Insulation Resistance Testers

Process Calibration Tools

Intrinsically Safe Products

ScopeMeters® Test Tools

Accessories

Vibration

Dry Well

Calibrators



Visit Grainger.com/Fluke for more Fluke tools and special offers.

Fluke Connect

Fluke. Keeping your world up and running.®

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AVAILABLE THROUGH

