







Contact Temperature Quick Reference Guide

	Fluke 51 Series II	Fluke 52 Series II	Fluke 53 Series II	Fluke 54 Series II
	Field unit with laboratory accuracy		Field unit with laboratory accuracy and certification	
	High accuracy contact temperature measurement with fast response time to capture measurements and show you trends		High accuracy contact temperature measurement with fast response time to capture measurements and show you trends. Seven thermocouples supported with datalogging capabilities for analysis and reports using FlukeView Forms. Product can be certified to meet laboratory requirements.	
				
Recommended uses	Use for quality control to ensure product is within manufacturing tolerances, calibration—to monitor product conformance and manufacturing processes, HVAC applications to monitor air temperature and equipment, and food processing and preparation to monitor safe and unsafe temperature levels.		Use for quality control to ensure product is within manufacturing tolerances, calibration—to monitor product conformance and manufacturing processes, HVAC applications to monitor air temperature and equipment, and food processing and preparation to monitor safe and unsafe temperature levels. Bio medical and medical lab applications where temperature measurement is critical and chemical and pharmaceutical industry applications where precision and certification is required.	
Thermocouple types	K, J, T, E		K, J, T, E, N, R, S	
Temperature range	J-type: -210 °C to 1200 °C (-346 °F to 2192 °F); K-type: -200 °C to 1372 °C (-328 °F to 2501 °F); T-type: -250 °C to 400 °C (-418 °F to 752 °F); E-type: -150 °C to 1000 °C (-238 °F to 1832 °F)		J-type: -210 °C to 1200 °C (-346 °F to 2192 °F); K-type: -200 °C to 1372 °C (-328 °F to 2501 °F); T-type: -250 °C to 400 °C (-418 °F to 752 °F); E-type: -150 °C to 1000 °C (-238 °F to 1832 °F); N-type: -200 °C to 1300 °C (-392 °F to 2373 °F); R and S-Type: 0 °C to 1767 °C (32 °F to 3212 °F)	
Number of inputs	Single	Dual	Single	Dual
MIN / MAX / AVG Recording with Time Stamp	Yes		Yes	
Differential (T1-T2) readout	—	Yes	—	Yes
Datalogging up to 500 points	—		Yes	
Time stamp	Relative time		Time of day	
Temperature scale	ITS-90		ITS-90	
Applicable standards	NIST-175		NIST-175	
Display resolution	0.1 °C / °F/K < 1000 °		1 °C/F/K ≥ 1000 °	
Battery life (typical)	1000 hours		1000 hours	
Dual display w/backlight	Yes		Yes	
IR data port for PC interface	—		Yes	
FlukeView® Forms	—		Yes	

Food Pro Series Quick Reference Guide

	FoodPro	FoodPro Plus
	First line of defense and the last word in food safety	
	Specially designed for food service applications. Both products feature IP54 sealing and an HACCP Check indicator to instantly spot safe and potentially unsafe surface temperatures. The FoodPro Plus has a fold out probe for internal temperatures and a timer for monitoring, cooking, cooling and exposure times.	
		
Recommended uses	Food inspection, Food service, HACCP Programs	
Temperature range	-30 °C to 200 °C (-20 °F to 390 °F)	-35 °C to 275 °C (-25 °F to 525 °F); Probe: -40 °C to 200 °C (-40 °F to 390 °F)
Typical distance to target (spot)	Up to 250 mm or 10 in	
Optical resolution (D:S)	2.5:1 @ 90 % energy, typical	
Accuracy +/- % of reading	Assumes ambient operating temperature of 23 °C ± 2 °C (73 °F ± 4 °F) For Infrared: Between 0 °C and 65 °C (32 °F to 150 °F): ± 1 °C (± 2 °F), Above 65 °C (150 °F): ± 1.5 % of reading, Below 0 °C (32 °F): ± 1 °C (± 2 °F): ± 0.1 degree/degree. For Probe (FoodPro Plus only): Between -5 °C and 65 °C (23 °F to 150 °F): ± 0.5 °C (± 1 °F), Above 65 °C (150 °F): ± 1 % of reading, Below -5 °C (23 °F): ± 1 °C (± 2 °F)	
Sighting	LED target illumination For more accurate measurements	
Emissivity	Pre-set for food service applications	
Probe	—	Class A (RTD)
Certifications	CE, NSF, FDA/IEC	

The information in this document is a summary of specifications for the products listed. Please check the product data sheet for a complete list of specifications. Specification and information on this document is subject to change with out notice.
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Fluke Temperature Selection Guide

You know and trust Fluke for rugged, reliable and accurate digital multimeters. But did you know you can get the same Fluke quality in thermometers?

With more than two decades of thermometry experience, Fluke knows temperature.

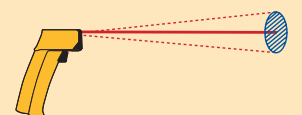
Today, we offer a complete set of contact and non-contact

IR temperature test tools, plus all the probes, accessories and application expertise you need for your application. And Fluke backs its tools with the industry's best warranty and highest rated customer service.

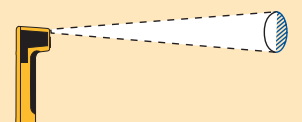
When you need to measure temperature, make sure you've got a Fluke thermometer in your toolbox.

How to choose the right model	Non-contact infrared handheld thermometers Just point and shoot.	Contact thermometers Get the accuracy, ruggedness and flexibility you need.
Question #1 Do you want to measure internal, ambient or surface temperatures?	Internal Use a non-contact model with a contact probe – consider a Fluke 66, 68, 574, 576 or FoodPro™ Plus Surface Use a non-contact model	Internal or ambient Use a contact model with the appropriate probe – consider a Fluke 51, 52, 53 or 54
Question #2 What is your temperature range?	Above 538 °C (1000 °F) – Consider 66, 68 or 57X Series models Below 538 °C (1000 °F) – Consider a model 61, 62 or 63	Up to 1372 °C (2501 °F) – Consider a model 51, 52, 53 or 54
Question #3 What material will you be measuring?	Organic, painted, or oxidized materials Consider a 66, 68 or 57X Series non-contact thermometer with adjustable emissivity and probe	Reflective metals Consider a model 51, 52, 53 or 54
Question #4 How close can you get?	At a distance Use a non-contact model. If distance is over 5 m (15 ft) consider 68 or 57X family. Or if hot, moving, in a dangerous location or energized.	Touch Use a contact model with probe if target is not over 250 °C (482 °F) and it is not hot, moving or energized. Otherwise use a non-contact model.
Question #5 How large is the target?	Large Consider a 61, 62 or 63 non-contact model for wider area measurement Small Consider a 66, 68 or 57X non-contact model	Small Use a contact model with the right probe
Question #6 Do you want to keep audit records?	Datalogging models: Consider a Fluke 574 or 576	Datalogging models: Consider a Fluke 53 or 54
Question #7 Are you doing predictive maintenance, which requires reports?	Data output models: Consider a Fluke 574 or 576	Data output models: Consider a Fluke 53 or 54
Question #8 Do you need an instantaneous temperature reading because the object is moving, changing, or being scanned?	Use non-contact product for instant readings	Use contact product if instant readings are NOT necessary

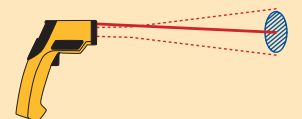
Sighting options types



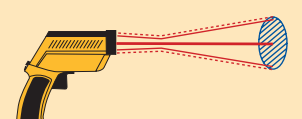
Laser point sighting
Models: 61, 62
Single-point laser indicates the approximate center of the target spot.



LED target illumination
Models: FoodPro and FoodPro Plus
High brightness LED illuminates the approximate measurement area circle.



Extra bright laser point
Models: 63, 66 and 68
Highly visible, more powerful single-point laser indicates the approximate center of the target spot.



True Dimension™ Sighting
Models: 572, 574 and 576
A coaxial three-dot laser sighting system indicating the true diameter of a measurement spot (90 % energy).