

FLUKE®

Calibration

1551A Ex/1552A Ex Intrinsically Safe “Stik” Thermometers

The new “gold standard”
of industrial temperature
calibration

Fluke Calibration.
Precision, performance, confidence.™

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1552A Ex



1551A Ex



The new “gold standard” of industrial temperature calibration

Finally, a digital substitute for your mercury-in-glass thermometers! Highly accurate and durable, the Fluke 1551A Ex/1552A Ex “Stik” Thermometer is soon to become the new “gold standard” of industrial temperature calibration. Whether working outdoors in environments where potentially explosive gases may be present or on the floor of a processing plant, the intrinsically safe, battery-operated, portable reference thermometer is designed to go where you work.

The RTD sensor of the “Stik” Thermometer is housed in a rugged stainless steel sheath—you no longer have to worry about breaking a mercury-in-glass thermometer and the subsequent cleanup. The probe and digital readout are fixed together, calibrated as a system, and accurate to ± 0.05 °C over the full

temperature range. The large backlit LCD display rotates 90° making it easy to read from any position. Minimize measurement errors with the user-configurable temperature trend/stability indicator which tells you when your temperature source is stable or if your temperature is trending up or down.

- ± 0.05 °C accuracy over full range
- Intrinsically safe (ATEX compliant)
- Display temperature in °C or °F
- Optional data logging to internal memory
- Temperature trend indicator
- User selectable resolution (0.1, 0.01, 0.001)
- 300 hour battery life
- Percent battery-life and low battery indicator
- NVLAP accredited calibration (NIST traceable)



Specifications

	1551A Ex	1552A Ex
Temperature range	-50 °C to 160 °C	-80 °C to 300 °C
Accuracy (1 year)	± 0.05 °C	
Display units	°C, °F	
Sensor type	100 Ω thin film RTD	100 Ω wire-wound PRT
Probe temperature coefficient	0.00385 $\Omega/\Omega/^\circ\text{C}$ nominal	
Sensor length	≤ 10 mm	≤ 30 mm
Sensor position (from sheath tip)	3 mm	
Minimum immersion depth ¹	70 mm	120 mm
Probe sheath material	SST	
Response time	4.8 mm diameter probe (3/16 in): 14 seconds 6.35 mm diameter probe (1/4 in): 21 seconds	
Probe hysteresis	± 0.01 °C	
Temperature resolution	Selectable: 0.1, 0.01, 0.001 (default 0.01)	
Sample rate	Selectable: 0.5, 1, 2, seconds (default 1)	
Operating temperature range of readout	-10 to 50 °C	
Storage temperature	-20 °C to 60 °C, 0 to 95% RH, non-condensing	
Optional data logging ²	Up to 10k time-stamped readings stored to internal memory	
Logging intervals ²	2, 5, 10, 30, or 60 seconds; 2, 5, 10, 30, or 60 minutes	
Averaging	Moving average of most recent 2 to 10 readings, user selectable (ON/OFF, 2, 5, 10)	
Communications	RS-232 stereo jack (access calibration parameters only)	
EMC compliance	EN61326:2006 Annex C; CISPR II, Edition 5.0-2009; Class “B”	
Enclosure rating	IP50	
Calibration	NVLAP accredited, NIST Traceable System Calibration	
Characterization	CVD	ITS-90

¹ Per ASTM E 644

² See ordering information for optional data logging configurations

Included Accessories

NVLAP –accredited report of calibration, user’s guide on CD-ROM, 3 AAA batteries

Ordering Information

1551A-9	“Stik” Thermometer
1551A-12	“Stik” Thermometer
1551A-20	“Stik” Thermometer
1551A-9-DL	“Stik” Thermometer with datalogging
1551A-12-DL	“Stik” Thermometer with datalogging
1551A-20-DL	“Stik” Thermometer with datalogging
1552A-12	“Stik” Thermometer
1552A-12-DL	“Stik” Thermometer with datalogging

Note: Model number appended with a -9, -12, -20 indicates probe sheath length in inches. All probe diameters are 6.35 mm with the exception of the 1551A-9, which is 4.8 mm diameter

Battery Life: 300 hours typical without LCD, 3 AAA

Size (HxWxD): 114 x 57 x 25 mm

Weight: 196 grams

Warranty: 1 year

Recommended Accessories



1551-CASE
Carrying case



1551-CBL
RS-232 cable