

TECHNICAL DATA

Fluke 1552a Stik Thermometer & Temperature Calibrator



Key features

- Intrinsically-safe, battery operated, portable reference thermometer
- Provides accuracy of ±0.05°C (±0.09°F) over full range
- Features intrinsically-safe operation (ATEX and IECEx compliant)
- Measures -80 °C to 300 °C (-112 °F to 572 °F)
- Provides user-configurable temperature with Trend/Stability indicator
- Displays temperature in °C or °F

Product overview: Fluke 1552a Stik Thermometer & Temperature Calibrator

Fluke 1552A Stik Thermometer is the "gold standard" of industrial temperature calibration

Finally, there is a digital substitute for your mercury-in-glass thermometers. The Fluke 1552A "Stik" Thermometer delivers repeatable temperature measurements accurate to ±0.05°C over its full range.

Whether you work 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. It's a great choice for daily checks of working thermometers, custody transfer temperature determination, PET calibration, LIG calibration, and temperature transmitter calibration and verification.

The stainless steel probe and digital readout are fixed together and calibrated as a system. The large backlit LCD display rotates 90° degrees making it easy to read from any angle. And a user-configurable stability/trend indicator lets you know



when your temperature is stable enough to record an accurate measurement. A user-settable auto-off function extends typical battery life to up to 300 hours. And the low-battery indicator and stop-measure function prevents erroneous measurements from being made due to a low battery. Plus you can easily and accurately calibrate the 1552A with a simple three-point calibration function.

Other useful features:

- Delivers 300-hour battery life
- Shows percent battery-life and low-battery indicators
- Includes NVLAP-accreditation and NIST-traceable calibration
- Measures and sources pressure using any of 50 Fluke 700Pxx Pressure Modules
- Allows you to creates and run automated as-found/as-left procedures to satisfy quality programs or regulations, and record and document results
- Holds up to a full week of downloaded procedures and calibration results
- Offers many flexible features like autostep, custom units, user-entered values during test, one-point and two-point switch testing, square root DP flow testing, programmable measurement delay and more.
- Offers compatibility with DPCTrack2 and many other asset management software packages
- Bright white dual display for reading both sourced and measured parameters simultaneously
- Easy-to-use multi-lingual interface
- Gas gauge and rechargeable Li-Ion battery for 10 hour uninterrupted use
- Comes with three-year warranty and DPC/Track trial software

Specifications: Fluke 1552a Stik Thermometer & Temperature Calibrator

Specifications	
Temperature range	-80°C to 300°C (-112°F to 572°F)
Accuracy (1 year)	±0.05°C (±0.09°F)
Temperature resolution	Selectable: 0.1, 0.01, 0.001 (default 0.01)
Sample rate	Selectable: 0.5 seconds, 1 second, 2 seconds (default 1 second)
Readout temperature coefficient	Add ±10 ppm/°C of full scale temperature from –10 °C to 18 °C and 28 °C to 50 °C
Probe temperature coefficient	0.00385 Ω/Ω/°C nominal
Nominal probe resistance at 0 °C	100 Ω
Probe hysteresis	±0.01°C
Response time	Approximately 20 seconds
Operating temperature range of readout	-10°C to 50°C (14°F to 122°F)
Humidity range	0% to 95% RH, non-condensing
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Display units	°C, °F
Sensor type	100 Ω wire-wound PRT
Sensor length	≤ 30 mm
Sensor position (from sheath tip)	3 mm (0.1 in)



Specifications	
Minimum immersion depth	Wet medium (liquid bath, thermowell with thermal compound) 70 mm (2.8 in) Dry medium (dry-well, thermowell without thermal compound) 120 mm (4.8 in)
Maximum immersion depth	75 mm (3 in) less than the total length. Make sure the last 75 mm of the probe, nearest to the internal electronics of the device, are not put into the heat source.
Probe sheath material	Stainless steel
Optional data logging ¹	Up to 10,000 time-stamped readings stored to internal memory
Logging intervals ¹	2 seconds, 5 seconds, 10 seconds, 30 seconds, or 60 seconds
Damping	Moving average of the most recent 2 to 10 readings (ON/OFF, 2, 5, 10)
Communications	RS-232 stereo jack (access calibration parameters only)
AC power	None
DC power	3-AAA alkaline batteries See Users Manual for approved batteries
Battery life	Approximately 300 hours (12.5 days) of continuous operation with the backlight off.
Battery save (auto-off) range	Selectable from 1 to 30 minutes or can be disabled
Safety	IEC 60079-0, IEC 60079-11: Ex ib IIB T4 Gb; IEC 61010-1: Pollution Degree 2
Electromagnetic compatibility	International: IEC 61326-1: Portable Equipment; IEC 61326-2-2; CISPR 11: Group 1, Class B Group 1: Equipment has intentionally generated and/or uses conductively coupled radio frequency energy that is necessary for the internal function of the equipment itself. Class B: Equipment is suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes. USA (FCC): 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.
Size (readout only)	125 mm x 62 mm x 35 mm (5 in x 2.5 in x 1.4 in)
Probe Size	6.35 mm x 305 mm (1/4 in x 12 in)
Weight	200 g (6.9 oz)
Calibration (included)	NVLAP-accredited, NIST-traceable
Characterization	ITS-90
1. See ordering information for optional data logging configurations	



Ordering information



Fluke 1552A-12

Fluke Calibration 1552A-12 Stik Thermometer $6.35 \, \text{mm} \times 305 \, \text{mm} \, (1/4 \, \text{in} \times 12 \, \text{in})$

Includes:

- Fixed PRT, -80°C to 300°C
- NVLAP-accredited report of calibration
- User's Guide on CD-ROM
- 3 AAA batteries

For 1552a with datalogging options below, please visit: us.flukecal.com and request a quote.

Fluke 1552A-12-DL

Fluke Calibration 1552A-12-DL Stik Thermometer 6.35 mm x 305 mm (1/4 in x 12 in) with Datalog

Includes:

- Fixed PRT, -80°C to 300°C
- NVLAP-accredited report of calibration
- User's Guide on CD-ROM
- 3 AAA batteries



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Fluke Europe B.V.
P.O. Box 1186
5602 BD Eindhoven
The Netherlands
www.fluke.com/en
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For more information call: In Middle East/Africa +31 (0)40 267 5100

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