


Aumictech

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

FLUKE

Fluke 724 Temperature Calibrator

The Fluke 724 is a handheld temperature calibrator that measures and sources thermocouples and RTDs plus volts and ohms, and measures current for transmitter loops. Dual display and simple controls support sensor and temperature transmitter testing, including high-speed pulsed RTD transmitters, with 24 V loop power. Loop power: 24 V; accuracy 10%; max 22 mA short-circuit protected Accuracy temperature window: +18 to +28 degC after 5 minute warmup Operating temperature class: -10 degC to 55 degC family class Specs from Fluke 724 product page and 724/725/726 family manuals. Confirm TC/RTD types enabled in firmware and whether current source is measure-only on this unit.



MODEL

Fluke 724

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

724

LISTING

<https://aumictechlabs.com/products/724-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke 724 Temperature Calibrator simultaneously measures and sources temperature signals across RTD, thermocouple, voltage, current, and resistance parameters. Designed for field and laboratory temperature sensor verification, it delivers calibration-grade accuracy with straightforward operation and dual-line display output. The instrument supports 10–12 thermocouple types (J, K, T, E, L, N, U, B, R, S, XK, BP) and 7 RTD variants (Ni120, Pt100 385/393/JIS/3926, Pt200, Pt500, Pt1000), plus DC voltage, current, and resistance measurement and sourcing functions. Technical Specifications Temperature Measurement & Sourcing Thermocouple types: J, K, T, E, L, N, U, B, R, S, XK, BP RTD types: Ni120; Pt100 (385, 393, JIS,

3926); Pt200 (385); Pt500 (385); Pt1000 (385) RTD accuracy: 0.2 °C to 0.33 °C (range dependent) Thermocouple accuracy: 0.7 °C to 2.2 °C (range and type dependent) Electrical Measurement & Sourcing Voltage measurement: 0–30 V DC; voltage sourcing: 0–10 V DC Millivolt measurement/sourcing: 0–100 mV DC; -10.00 mV to +75.00 mV Current measurement: 0–24 mA DC Resistance measurement: 0–3200 Ω; resistance sourcing: 15–3200 Ω Voltage DC measurement accuracy: 0.02% R_{dg} + 2 LSD; 0.025% + 1 count (TC connector) Voltage DC source accuracy: 0.02% R_{dg} + 2 LSD; 0.025% Current DC accuracy: 0.02% R_{dg} + 2 LSD Resistance accuracy: 0.1 Ω to 1.5%; 0.1 Ω (4-wire), 0.15 Ω (2- and 3-wire) Resistance source accuracy: 0.15 Ω to 1 Ω Temperature coefficient: ±0.005% of range per °C Loop Power 24 V DC supply output; 10% accuracy

Key Features Simultaneous input and output display No-menu control interface 24 V DC loop power for transmitter testing 4-wire, 2-wire, and 3-wire RTD measurement modes Compact form factor: 96 × 200 × 47 mm

Typical Applications RTD and thermocouple sensor calibration and verification Temperature transmitter loop testing Field instrument commissioning and maintenance Industrial process temperature validation

Compatibility & Integration The 724 measures and sources across industry-standard temperature sensor types and accepts voltage, current, and resistance signals for general-purpose instrumentation verification.

Features & description

From manufacturer datasheet

Features

• Dual display measure and source • Supports multiple TC and RTD types • Handles pulsed RTD transmitters • 24 V loop power short-circuit protected • Ramp and step source functions • Compact temperature-focused calibrator

Applications

• Thermocouple and RTD sensor simulation and measurement • Temperature transmitter calibration with loop power • Millivolt and ohms source/measure for temperature circuits • Field checks of gauges and temperature process instruments

724 Characteristics / Specifications

PARAMETER	VALUE
Model	724
Manufacturer	Fluke
Instrument Type	Temperature Calibrator
Alias	724; Fluke 724
DC voltage measure upper 30 V	0.02% + 2 counts
DC voltage measure lower 20 V	0.02% + 2 counts
DC voltage measure 100 mV	0.02% + 2 counts
TC mV measure/source	-10.00 mV to 75.00 mV; 0.025% + 1 count
DC current measure 24 mA	0.02% + 2 counts
DC voltage source 100 mV	0.02% + 2 counts
DC voltage source 10 V	0.02% + 2 counts
RTD Ni120 measure/source	0.2 degC
RTD resolution	0.1 degC
TC TypeJmeasure/source accuracy class	0.7 degC
TC TypeKmeasure/source accuracy class	0.8 degC
TC TypeTmeasure/source accuracy class	0.8 degC
Loop power	24 V; accuracy 10%; max 22 mA short-circuit protected
Ramp modes	slow, fast, 25% step-ramp
Step modes	25% of range; 100% of range
Accuracy temperature window	+18 to +28 degC after 5 minute warmup
Operating temperature class	-10 degC to 55 degC family class
Specification interval	one year Notes Specs from Fluke 724 product page and 724/725/726 family manuals. Confirm TC/RTD types enabled in firmware and whether current source is measure-only on this unit.
Operating temperature	class: -10 degC to 55 degC family class

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	class: -10 degC to 55 degC family class
Operating Temperature	class: -10 degC to 55 degC family class
Operating temperature class	-10 degC to 55 degC family class
Specification interval	one year Notes Specs from Fluke 724 product page and 724/725/726 family manuals. Confirm TC/RTD types enabled in firmware and whether current source is measure-only on this unit.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	724
Manufacturer	Fluke
Instrument Type	Temperature Calibrator
Alias	724; Fluke 724
DC voltage measure upper 30 V	0.02% + 2 counts
DC voltage measure lower 20 V	0.02% + 2 counts
DC voltage measure 100 mV	0.02% + 2 counts
TC mV measure/source	-10.00 mV to 75.00 mV; 0.025% + 1 count
DC current measure 24 mA	0.02% + 2 counts
Resistance measure 0-400 ohm 4-wire: 0.1 ohm Resistance measure 401-1500 ohm 4-wire: 0.5 ohm Resistance measure 1500-3200 ohm 4-wire: 1 ohm DC voltage source 100 mV: 0.02% + 2 counts DC voltage source 10 V: 0.02% + 2 counts RTD Pt100-385 measure 4-wire: 0.33 degC RTD Pt100-385 source: 0.33 degC RTD Pt1000-385 measure/source: 0.2 degC	
Specifications	
PARAMETER	VALUE
RTD Ni120 measure/source	0.2 degC
RTD resolution	0.1 degC
TC TypeJmeasure/source accuracy class	0.7 degC
TC TypeKmeasure/source accuracy class	0.8 degC
TC TypeTmeasure/source accuracy class	0.8 degC
Loop power	24 V; accuracy 10%; max 22 mA short-circuit protected
Ramp modes	slow, fast, 25% step-ramp
Step modes	25% of range; 100% of range
Accuracy temperature window	+18 to +28 degC after 5 minute warmup
Operating temperature class	-10 degC to 55 degC family class

PARAMETER

VALUE

Specification interval

one year

Notes

Specs from Fluke 724 product page and 724/725/726 family manuals. Confirm TC/RTD types enabled in firmware and whether current source is measure-only on this unit.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.