Datos técnicos

525A Temperature/Pressure Calibrator

Características principales

- Simulates and measures all ANSI thermocouples, as well as L and U types, and provides cold junction compensation to enable calibration of a wide variety of thermocouple instrumentation.
- Direct input for storage of ITS-90 RTD constants for highly accurate simulation and measurement of RTD probes.
- Direct measurement of all Fluke 700 Series and model 525-P pressure modules covering the most common pressure ranges from 0-1" H20 to 0-10,000 PSI.
- Converts easily to any pressure unit directly from the front panel or through remote communications.
- Sources dc voltage and current for multifunction workload coverage, enabling calibration of data loggers, strip chart recorders, multimeters, and other industrial instruments.
- Supports automation using Fluke's MET/CAL® Plus Calibration Management Software or custom automated programs with standard RS-232-C or optional GPIB interface.
- Eight user programmable setpoints allow quick recall of values for Zero, Span and linearity checks during calibration. Programmable setpoint dwell times for automated calibration and troubleshooting.
- Programmable setpoint dwell times for automated calibration and troubleshooting.
- Selectable internal or external CJC (cold junction compensation) provides you with the ability to make exacting thermocouple measurements using remote junctions.
- Easy five-way binding posts for low-loss convenient hookup. Banana plug, screw terminal, spade lug, wraparound terminal, wire pass-through terminal.
- NIST-traceable calibration with data is included.

Descripción general del producto: 525A Temperature/Pressure Calibrator

At home in the cal lab
The 525A is a compact bench instrument well suited for traditional calibration laboratories with a large temperature workload. Its 0-100V output and 0-100 mA current capabilities – plus its ability to serve as a highly-accurate pressure standard – make it a versatile performer.

Filling the gap in the instrument shop
In process plant environments, instrument shop technicians responsible for maintaining the equipment pool need to calibrate and repair a wide range of instruments, transmitters, field calibrators, P/I converters, transducers, and temperature probes. With its ability to simulate almost any temperature sensor, precise pressure monitoring capability, and dc voltage and current accuracy rivaling any calibrator in its price range, the 525A fills the gap between lower accuracy handheld field calibrators and more expensive high-end multifunction calibrators.

A good fit for ATE test applications
With precise calibration-grade instrument control enabled via an IEEE bus, the 525A is a hard working addition to automated test systems in quality and manufacturing test applications requiring capabilities such as voltage and current sourcing, sensor simulation, and temperature monitoring and validation.

Powerful functionality that is easy to use
From start to finish, the 525A is designed for ease of operation. The intuitive front panel design features large keypads and display that help reduce training time and make the 525A comfortable to use even for long periods of time. Plus, you can store frequently used constants for a variety of probes in memory for faster setup on the job.
MET/CAL® Plus automates 525A calibration and documentation management
You can use the 525A with Fluke's MET/CAL Plus Calibration Software (v 6.11 or later) to meet the stringent documentation and reporting requirements imposed by quality standards such as ISO 9000. MET/CAL Plus is a powerful software environment for creating, editing, testing, and documenting calibration procedures, and for performing automated calibrations.

Pressure modules
An optional set of external pressure modules provides pressure measurement capability. The 525A can accept either the Fluke 700 Series pressure modules or the Fluke Model 525A-P series pressure modules. These modules plug directly into the calibrator's front panel Lemo connector; the 525A firmware auto-detects the type and value of the attached module.

Especificaciones: 525A Temperature/Pressure Calibrator

Specifications One Year (Source)	
Voltage (1 ma Max Load)	0 to 100 V Best one year specification: 30 ppm of seing
Current (10V Compliance	0 - 100 mA Best one year specification: 100 ppm of seing

Resistance	5 - 4,000 Ohms Best one year specification: 0.03 Ohms
Thermocouple (B,C,E,J,K,L,N,R,S,T,U)	Standard thermocouple ranges Best one year specification: 0.14° C (type E)

Specifications One Year (Measure)	
SPRT 25.5 Ohm	- 200° C to 660° C Best one year specification: 0.02 C
Resistance	5 - 4,000 Ohms Best one year specification: 0.03 Ohms
Thermocouple (B, C, E, J, K, L, N, R, S, T, U)	Standard thermocouple ranges Best one year specification: 0.14° C (type E)
RTD*	-200° C to 800° C Best one year specification: 0.07° C (pt 100)
Ni 120	- 80° C to 100° C Best one year specification: 0.01° C
Cu 10	- 100° C to 260° C Best one year specification: 0.06° C
YSI 400 thermistor	15° C to 50° C Best one year specification: 0.007° C

General Specifications	
Seling Time	Less than 5 seconds
Temperature Performance	Operating: 0° C to 50° C Calibration (tcal): 15° C to 35° C Storage: - 20° C to 70° C
Interfaces	Temperature coefficient for temperatures outside tcal + 5° C is 10 % of the 90 day specification per °C
RH	Operating: < 80% to 30° C, < 70 % to 40° C, 40 % to 50° C Storage: <95%, noncondensing
Analog Low Isolation	20V
EMC	IEC 61326- 1/1997 (EMC)
Weight/Dimensions	9 lbs (4 kg) ; H 5.25" x W 12.5" x D 18.6" (H 13.1 cm x W 31.3 cm x D 47.3 cm)

Modelos

525A
Calibrador de temperatura/presión

525A-GPIB
Calibrador de temperatura/presión con interfaz GBIB

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