FLUKE®

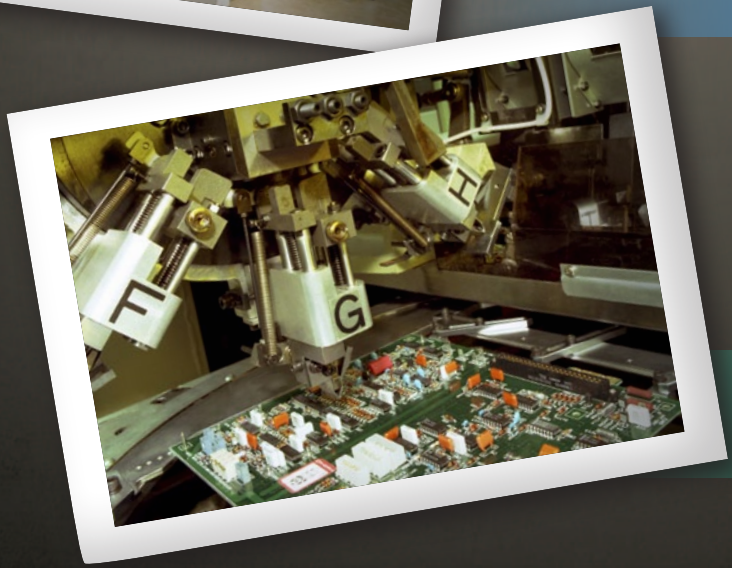
2012 Short Form Catalog

Process Calibration Tools

A full range of accurate, rugged and reliable calibration solutions for field and bench applications

Electrical, Multifunction, and mA Loop Calibration

Pressure and Flow Calibration



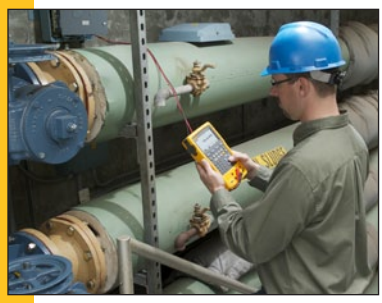
Temperature Calibration

Process Calibration Tools

From Fluke and Fluke Calibration

Working in a process environment such as pharmaceutical, refining or other industrial area can be challenging. Whether you're working at a bench, out in the plant, or in the field, you need accurate tools that you can count on.

Finding the right tools for the specific challenges you face every day is important, so we've provided an "at-a-glance" guide to the wide range of multifunction, mA loop, pressure and temperature calibrators that we carry. For complete information on our field and bench solutions to all your calibration needs visit www.fluke.com, www.flukecal.com, or one of the product pages listed in this catalog.



Electrical and multifunction calibration

Fluke offers a broad range of field and bench calibrators to source, simulate, and measure pressure, temperature, and electrical signals to help you verify and adjust your test equipment or almost any process instrument.

mA loop calibration

Loop calibrators are essential tools for working with 4–20 mA current loops. Fluke loop calibrators provide mA sourcing, simulation and measurement, readouts in both mA and % of span, 24 V loop supply, simple operation and accuracy you can count on.

Pressure and flow calibration

Pressure, level and flow instrumentation is found in virtually every process plant. Periodic calibration of these instruments is required to keep plants operating efficiently and safely. Fluke provides a wide selection of field and bench calibration tools to help you quickly and reliably calibrate your pressure and gas flow instrumentation.

Temperature calibration

Temperature calibration refers to the calibration of any device used in a system that measures temperature—from sensors to transmitters to displays. Fluke offers bench and field solutions to ensure process temperature accuracy of not only the system's electronic temperature signals, but also the very temperature sensors that initiate those signals.

FLUKE®

Process Calibration Tools

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Electrical, Multifunction, and mA Loop Calibration

753

754

525B

Multifunction Calibrators

These field and bench calibrators source, simulate, and measure pressure, temperature, and electrical signals with exceptional precision.

753 Documenting Process Calibrator

Rugged handheld tool for sourcing, simulating and measuring pressure, temperature, and electrical signals.

- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors, transmitters and other instruments
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Power transmitters during test using loop supply with simultaneous mA measurement
- Download procedures and upload calibration results from field calibrations

www.fluke.com/753

754 Documenting Process Calibrator with HART

Rugged, reliable tool for calibrating, maintaining, and troubleshooting HART and other instrumentation.

- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors, transmitters and other instruments
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Supports popular models of HART transmitters, with more devise-specific command support than any other HART field calibrator
- Download procedures and upload calibration results from field calibrations

www.fluke.com/754

525B Precision Bench Process Calibrator

A workhorse combination of high accuracy and broad functionality for temperature and pressure instrument calibration.

- A calibrator to address process industry instrumentation
- 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
- RTD source uncertainties to 0.03 °C

www.flukecal.com/525B

726

725

725Ex

8808A

8845A/8846A

726 Precision Multifunction Process Calibrator

Designed specifically for the process industry with broad workload coverage, calibration power and unsurpassed accuracy. Includes all the features and functions of the 725 below plus:

- Enhanced accuracy
- Pulse count sourcing and pulse measurement totalizing
- Pressure switch test
- Error % calculation

www.fluke.com/726

725 Multifunction Process Calibrator

A powerful and easy-to-use field calibrator to test and calibrate almost any process parameter.

- Measure volts, mA, RTDs, thermocouples, frequency, and ohms to test sensors and transmitters
- Source/simulate volts, mA, thermocouples, RTDs, frequency, ohms, and pressure to calibrate transmitters
- Measure/source pressure using any of 29 Fluke 700Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests

www.fluke.com/725

725EX IS Multifunction Process Calibrator

Easy-to-use, intrinsically safe field calibrator can calibrate almost any process instrument needing service where explosive gasses may be present.

- ATEX II 1 G Ex ia IIB 171 °C KEMA 04ATEX 1303X
- I.S. Class I, Division 1 Groups B–D, 171 °C compliance
- Measure Volts dc, mA, RTDs, thermocouples, frequency and ohms
- Source or simulate volts dc, mA, RTDs, thermocouples, frequency and ohms
- Measure/source pressure using any of eight Fluke 700PEX Pressure Modules

www.fluke.com/725EX

8808A Digital Multimeter

Versatile multimeter for manufacturing, development and service applications.

- 5.5 digit resolution
- Basic V dc accuracy of 0.015 %
- Dual display

www.flukecal.com/8808A

8845A/8846A Precision Multimeters

Precision and versatility for bench or systems applications.

- 6.5 digit resolution
- Basic V dc accuracy of up to 0.0024 %
- Dual display

www.flukecal.com/8845A

705

789

707

707Ex

787

mA Loop Calibrators

Fluke loop calibrators are ideal for a wide variety of calibration applications from 4 to 20 mA.

705 Loop Calibrator

A cost-effective, integrated solution for calibration, repair and maintenance of current loops.

- mA sourcing, simulation and measurement
- Simultaneous mA and % of span display
- 24 V loop supply with mA measure
- 0 V dc to 28 V dc measurement to check loop voltage

www.fluke.com/705

707 Loop Calibrator

A high performance, extremely fast and easy-to-use solution for calibration, repair and maintenance of current loops.

- mA sourcing, simulation and measurement
- 24 V loop supply with mA measure, including 250 Ω HART resistor
- 0 V dc to 28 V dc measurement to check loop voltage

www.fluke.com/707

707EX IS Loop Calibrator

An intrinsically safe option for use in explosion endangered areas—certified in accordance with the ATEX directive (Ex II 2 G Ex ia IIC T4) in Zones 1 and 2.

- 1 µA resolution for mA source, simulate and measure
- Measures V dc to 28 V
- 0–20 mA or 4–20 mA default startup modes
- HART® compatible resistance is connected in series with the loop supply for compatibility with HART communicators

www.fluke.com/707EX

787 ProcessMeter™

A complete troubleshooting solution in the palm of your hand with a digital multimeter and loop calibrator in one tool.

- 1000 V overload protection on V, ohms, frequency
- 150 V overload protection on mA, backed up by 440 mA 1000 V fuse
- 25 % manual step plus auto step and auto ramp on mA output
- CAT III 1,000V rating

www.fluke.com/787

789 ProcessMeter™

The 789 includes all the popular features of the 787 and adds:

- 24 V loop power supply
- 1200 ohm drive capability on mA source
- HART mode setting with loop power and a built-in 250 ohm resistor
- 0 % and 100 % buttons to toggle between 4 and 20 mA sourcing for a quick span check
- CAT IV 600 V rating

www.fluke.com/789

771

771 Milliamp Process Clamp Meter

Saves time by making fast, accurate measurements on 4–20 mA signal loops without breaking the circuit.

- 0.01 mA resolution and sensitivity
- Measure mA signals for PLC and control system analog I/O
- Measure 10 to 50 mA signals in older control systems using the 99.9 mA range

www.fluke.com/771

772

772 Milliamp Clamp Meter

Expanded features of the popular 771 mA Clamp Meter by adding loop power and mA sourcing to the capabilities.

- Measure 4 to 20 mA signals with in-circuit measurement
- Simultaneous mA in-circuit measurement with 24 V loop power for powering and testing transmitters
- Source 4 to 20 mA signals for testing control system I/O or I/Ps
- Automatically ramp or step the 4 to 20 mA output for remote testing

www.fluke.com/772

773

773 Milliamp Process Clamp Meter

The premier mA clamp meter, adds advanced troubleshooting features and voltage source/measure for testing voltage I/O. Icludes all the features of the 772 plus:

- DC voltage sourcing and measurement, verify 24 V power supplies or test voltage I/O signals
- Scaled mA output provides a continuous mA signal that corresponds to the 4 to 20 mA signal measured by the mA clamp
- Simultaneously source and measure mA signals

www.fluke.com/773

FLUKE®

Pressure and Flow Calibration

717

718

719

718EX

Handheld Pressure Calibrators

Built-in features like mA measure, loop power, switch test and transmitter error calculation make these pressure calibrators powerful tools that are easy to use.

717 Pressure Calibrator

Rugged, reliable and accurate calibrator with outstanding performance and durability.

- Measure pressure, 0.025 % of full scale with internal sensor up to 10,000 psi/690 bar sensor (10000G model)
- Measure mA with 0.015 % accuracy and 0.001 mA resolution, while sourcing 24 V loop power
- Measure pressure to 10,000 psi/700 bar using one of 29 Fluke 700Pxx Pressure Modules

www.fluke.com/717

718 Pressure Calibrator with Pump

Provides a total pressure calibration solution for transmitters, gauges and switches.

- Pressure source and milliamp measurement to calibrate and maintain almost any pressure device
- Integrated pump is easily cleaned when accidently exposed to fluids that reduces cost of ownership and repairs and enables servicing the pump in the field
- 1 psi, 30 psi, 100 psi and 300 psi ranges mean few extra tools required

www.fluke.com/718

719 Portable Electric Pressure Calibrator

Calibrate and test pressure devices quickly and easily with the built-in electric pump.

- Source mA with simultaneous pressure measurement to test valves and I/Ps
- Simulate mA signals to troubleshoot 4-20 mA loops
- Power transmitters during test using 24 V loop supply with simultaneous mA measurement

www.fluke.com/719

718EX IS Pressure Calibrator

A powerful, intrinsically safe and self-contained pressure calibrator for use in explosion endangered areas.

- ATEX II 1G Ex ia IIC T4 compliant
- Built-in pressure/vacuum hand pump, with fine adjust vernier and bleed valve
- 30 psi, 100 psi, and 300 psi ranges (2 bar, 7 bar, and 20 bar)
- Pressure measurement to 200 bar using any of eight intrinsically safe Fluke 700PEx Pressure Modules

www.fluke.com/718EX

700P Pressure Modules

A full range of differential, gage, absolute, vacuum, dual and intrinsically safe pressure modules are available, from –15 psi (–103 kPa) to 10,000 psi (69 MPa).

- Best-in-class 0.025 % reference uncertainty
- Rugged, chemical-resistant packaging
- Temperature compensated using proprietary micro-technology linearized output
- Digital communication to calibrators; no analog losses or errors

www.fluke.com/700P

700PEx IS Pressure Modules

Intrinsically safe pressure modules to create a complete pressure test solution.

- Includes NIST-traceable calibration certificate
- Certified by CSA: I.S. Class I, Div 1, Groups A–D T4, Ta = 0 °C to 50 °C
- ATEX II 1G Ex ia IIC T4 compliant

www.fluke.com/700PEX

700P

700PEX

Models	Range/ resolution	Range (approx) resolution	Reference uncertainty (23 ± 3 °C)	Highside media	Low side media	Fitting material
Differential						
Fluke 700P00	1 in. H_2O/0.001	0.25 kPa/0.0002	0.300 %	Dry	Dry	316 SS
Fluke 700P01*	10 in. H_2O/0.01	2.5 kPa/0.002	0.200 %	Dry	Dry	316 SS
Fluke 700P02	1 psi/0.0001	6900 Pa/0.7	0.150 %	Dry	Dry	316 SS
Fluke 700P22	1 psi/0.0001	6900 Pa/0.7	0.100 %	316 SS	Dry	316 SS
Fluke 700P03	5 psi/0.0001	34 kPa/0.001	0.050 %	Dry	Dry	316 SS
Fluke 700P23	5 psi/0.0001	34 kPa/0.001	0.025 %	316 SS	Dry	316 SS
Fluke 700P04	15 psi/0.001	103 kPa/0.01	0.025 %	Dry	Dry	316 SS
Fluke 700P24*	15 psi/0.001	103 kPa/0.01	0.025 %	316 SS	Dry	316 SS
Gage						
Fluke 700P05*	30 psi/0.001	207 kPa/0.01	0.025 %	316 SS	N/A	316 SS
Fluke 700P06*	100 psi/0.01	690 kPa/0.07	0.025 %	316 SS	N/A	316 SS
Fluke 700P27*	300 psi/0.01	2070 kPa/0.1	0.025 %	316 SS	N/A	316 SS
Fluke 700P07	500 psi/0.01	3400 kPa/0.1	0.025 %	316 SS	N/A	316 SS
Fluke 700P08	1000 psi/0.1	6900 kPa/0.7	0.025 %	316 SS	N/A	316 SS
Fluke 700P09*	1500 psi/0.1	10 MPa/0.001	0.025 %	316 SS	N/A	316 SS
Absolute						
Fluke 700PA3	5 psi/0.0001	34 kPa/0.001	0.050 %	316 SS	N/A	316 SS
Fluke 700PA4*	15 psi/0.001	103 kPa/0.01	0.050 %	316 SS	N/A	316 SS
Fluke 700PA5	30 psi/0.001	207 kPa/0.01	0.050 %	316 SS	N/A	316 SS
Fluke 700PA6	100 psi/0.01	690 kPa/0.07	0.050 %	316 SS	N/A	316 SS
Vacuum						
Fluke 700PV3	–5 psi/0.0001	–34 kPa/0.001	0.040 %	316 SS	Dry	316 SS
Fluke 700PV4	–15 psi/0.001	–103 kPa/0.01	0.040 %	316 SS	Dry	316 SS
Dual						
Fluke 700PD2	± 1 psi/0.0001	±6900 Pa/0.7	0.150 %	316 SS	Dry	316 SS
Fluke 700PD3	± 5 psi/0.0001	±34 kPa/0.001	0.040 %	316 SS	Dry	316 SS
Fluke 700PD4	± 15 psi/0.001	±103 kPa/0.01	0.025 %	316 SS	Dry	316 SS
Fluke 700PD5	–15/30 psi/ 0.001	–100/207 kPa/ 0.01	0.025 %	316 SS	N/A	316 SS
Fluke 700PD6	–15/100 psi/ 0.01	–100/690 kPa/ 0.07	0.025 %	316 SS	N/A	316 SS
Fluke 700PD7	–15/200 psi/ 0.01	–100/1380 kPa/ 0.1	0.040 %	316 SS	N/A	316 SS
High						
Fluke 700P29*	3000 psi/0.1	20.7 MPa/0.001	0.050 %	C276	N/A	C276
Fluke 700P30	5000 psi/0.1	34 MPa/0.001	0.050 %	C276	N/A	C276
Fluke 700P31	10000 psi/1	69 MPa/0.007	0.050 %	C276	N/A	C276

* Intrinsically safe version available for use with 718Ex and 725Ex.

P5510

P5513

P5514

P5515

Comparison Pressure Pumps

Precise generation and control for testing pressure-measuring instruments against master devices.

P5510 Gas Comparison Test Pump

Easy, efficient pressure and vacuum generation in a single device.

- Pressure to 2 MPa (300 psi)
- Vacuum to -80 kPa (-12 psi)

www.flukecal.com/P5510

P5513 Gas Comparison Test Pump

High quality, precise gas pressure generation and control.

- Precise pressure regulation to 210 Mpa (3k psi) with high quality needle valves
- Built in screw press for fine pressure adjustment
- Optional vacuum/pressure pump, -80 kPa to 2 Mpa (-12 psi to 300 psi)

www.flukecal.com/P5513

P5514 Hydraulic Comparison Test Pump

Easy, efficient hydraulic pressure generation.

- Generate and precisely adjust pressure to 70 Mpa (10 k psi)
- Compatible with a wide range of fluids

www.flukecal.com/P5514

P5515 Hydraulic Comparison Test Pump

High quality, precise hydraulic pressure generation and control.

- Generate and precisely adjust pressure to 140 Mpa (20 k psi)
- Integrated hand pump for system priming and large volume applications
- Compatible with a wide range of fluids

www.flukecal.com/P5515

700G

Reference Pressure Calibrators

Portable, high-quality pressure gauges for fast and accurate calibration test results.

700G Precision Pressure Gauge Calibrator

Easy to use; rugged and reliable construction with precision measurements.

- From 15 psi/1 bar to 10,000 psi/690 bar and 0.05 % accuracy
- Combine with a test pump kit for a complete pressure testing and calibration solution
- Use the 700G/TRACK Software to upload over 8,000 logged pressure measurements

www.fluke.com/700G

P3010/P3020/P3030

P3110/P3120

P3210/P3220

Bench Deadweight Testers

Deadweight testers are highly accurate, robust and flexible pressure measurement standards capable of calibrating a wide range of instruments.

P3010 Single Piston Gas Deadweight Tester

A high quality, high performance gas deadweight tester.

- 0.015 % of reading accuracy (0.008 % optional)
- Ranges cover from -100 kPa (-15 psi) vacuum to 3.5 MPa (500 psi) pressure
- Integrated vacuum/pressure pump available to 2 MPa (300 psi)

www.flukecal.com/P3010

P3020 Dual Piston Gas Deadweight Tester

Unique suspended piston design offers vacuum and pressure calibration in a single instrument.

- 0.015 % of reading accuracy (0.008 % optional)
- Ranges cover from 1.5 kPa (5 in H_20) to 3.5 MPa (500 psi)
- All models feature vacuum measurement to -100 kPa (-15 psi)
- Integrated vacuum/pressure pump available to 2 MPa (300 psi)

www.flukecal.com/P3020

P3030 High Pressure Gas Deadweight Tester

Innovative liquid-lubricated piston offers low drop rates and high tolerance to contamination.

- 0.015 % of reading accuracy (0.008 % optional)
- Ranges cover from 100 kPa (10 psi) to 14 MPa (2000 psi)
- Integrated control valves and screw press for fine adjustment

www.flukecal.com/P3030

P3110 Single Piston Oil Deadweight Tester

High quality, high performance, easy to use oil pressure calibration.

- 0.015 % of reading accuracy (0.008 % optional)
- Ranges cover from 100 kPa (10 psi) to 140 MPa (20 k psi)
- Integrated pressure generation and control is standard

www.flukecal.com/P3110

P3120 Dual Piston Oil Deadweight Tester

Dual piston design offers maximum hydraulic pressure calibration workload coverage.

- 0.015 % of reading accuracy (0.008 % optional)
- 100 kPa (10 psi) to 110 MPa (16 k psi) in a single instrument
- Integrated pressure generation and control is standard

www.flukecal.com/P3120

P3210 Single Piston Water Deadweight Tester

Specially designed to use water as a test medium.

- 0.015 % of reading accuracy (0.008 % optional)
- Ranges cover from 100 kPa (10 psi) to 70 MPa (10 k psi)
- Integrated pressure generation and control is standard

www.flukecal.com/P3210

P3220 Dual Piston Water Deadweight Tester

Dual piston design offers maximum water pressure calibration workload coverage.

- 0.015 % of reading accuracy (0.008 % optional)
- 100 kPa (10 psi) to 70 MPa (10 k psi) in a single instrument
- Integrated pressure generation and control is standard

www.flukecal.com/P3220

P3800

6241/6242

6531

6532

P3800 High Pressure Oil Deadweight Tester

High performance, easy to use very high pressure oil calibration.

- 0.02 % of reading accuracy (0.015 % optional)
- Ranges up to 400 MPa (60 k psi)
- Integrated pressure generation, intensifier and control

www.flukecal.com/P3800

6531 Electronic Deadweight Tester

A digital alternative to the traditional deadweight tester.

- 0.02 % of reading from 10 % to 100 % of instrument range (10:1 turndown)
- Ranges from 7 MPa (1000 psi) to 200 MPa (30 k psi)
- Integrated hydraulic pressure generation and control
- Compatible with water and a wide range of oils and other fluids
- Onboard test routines, data storage, and other advanced features

www.flukecal.com/6531

6532 Extended Range Electronic Deadweight Tester

All the features of model 6531 with extended pressure range for maximum workload coverage.

- 0.02 % of reading from 1 % to 100 % of instrument range (100:1 turndown)
- Models with full scale ranges from 70 MPa (10 k psi) to 200 MPa (30 k psi)

www.flukecal.com/6532

Bench Pressure Controllers

High performance, with powerful features for a wide range of pneumatic pressure calibrations.

6241 Pressure Controller/ Calibrator

Fully automated, reliable, easy to use gas pressure calibration.

- 0.02 % accuracy of any span from 10 % to 100 % of instrument range (10:1 turndown)
- Ranges from ± 15 kPa (± 2 psi) to 14 MPa (2000 psi)
- Best in class control precision with very wide control turndown
- Absolute, gauge and bidirectional gauge modes included in most models
- Onboard test routines, data storage, and other advanced features

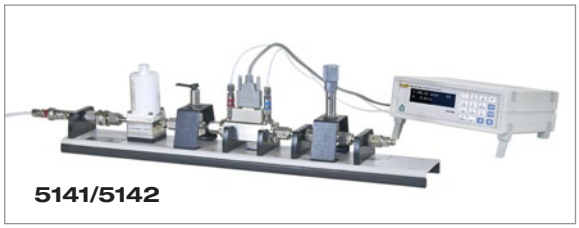
www.flukecal.com/6241

6242 Extended Range Pressure Controller/ Calibrator

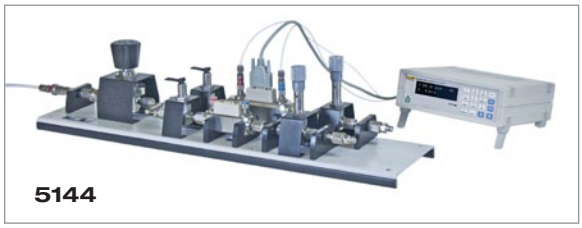
All the features of model 6241 with extended pressure range for maximum workload coverage.

- 0.02 % accuracy of any span from 1 % to 100 % of instrument range (100:1 turndown)
- Ranges from ± 100 kPa (± 15 psi) to 14 MPa (2000 psi)

www.flukecal.com/6242



5141/5142



5144

Flow Calibrators

Simple to understand and use, with features, rangeability and performance to cover most low gas flow calibration applications.

5141 Gas Flow Calibrator

Easy to use and reliable gas flow calibration.

- 0.5 % of reading accuracy from 10 % to 100 % of instrument range (10:1 turndown)
- Ranges from 0 to 100 sccm to 0 to 50 slm
- Real-time fully compensated mass flow display
- Calibrated for use in N2 and air, with corrections for a wide range of other test gases
- Integrated gas regulation and control provides a precise, uninterrupted flow source
- Unique design allows test line pressures of more than 350 kPag (50 psig)

www.flukecal.com/5141

5142 Extended Range Gas Flow Calibrator

All the features of model 5141 with extended flow range for maximum workload coverage.

- 0.5 % of reading accuracy from 1 % to 100 % of instrument range (100:1 turndown)
- Ranges from 0 to 1 slm to 0 to 50 slm

www.flukecal.com/5142

5144 Dual Extended Range Gas Flow Calibrator

Dual extended gas flow elements offer a complete, very wide range calibration system.

- 0.5 % of reading accuracy from 10 sccm to 50 slm

www.flukecal.com/5144

Temperature Calibration

712

9142/9143/9144

714

724

Handheld Temperature Calibrators

Suitable for calibrating temperature transmitters, panel meters, and other devices that connect to temperature sensors.

712 RTD Process Calibrator

Delivers outstanding performance, durability and reliability in a compact, lightweight, and easy-to-carry tool.

- Measure temperature from RTD probe output
- Simulate RTD output
- Measure additional RTDs using Ohms measurement function
- Simulate additional RTDs using Ohms source function

www.fluke.com/712

714 Thermocouple Calibrator

Delivers outstanding performance, durability and reliability in a compact, lightweight, and easy-to-carry device.

- Measure temperature from TC probe output
- Simulate TC output
- Calibrate linear TC transmitter with mV source function

www.fluke.com/714

724 Temperature Calibrator

Powerful and easy to use to measure and source functions for testing and calibrating almost any temperature instrument.

- Measure RTDs, thermocouples, ohms, and volts to test sensors and transmitters
- Source/simulate thermocouples, RTDs, volts, and ohms to calibrate transmitters
- Perform fast linearity tests with 25 % and 100 % steps

www.fluke.com/724

Multifunction Field Temperature Sources

Fast, lightweight and portable with precision temperature control traceable to national standards. Suitable for calibration of thermocouples, RTDs, PRTs, and other temperature sensors.

9142 Field Metrology Well

Maximizing portability, speed, and functionality for the industrial process environment.

- –25 °C to 150 °C temperature range
- Display accuracy of ± 0.2 °C over full range
- Built-in two-channel readout for PRT, RTD, thermocouple, 4-20 mA current
- Optional built-in reference thermometer readout

www.flukecal.com/9142

9143 Field Metrology Well

Maximizing portability, speed, and functionality for the industrial process environment.

- 33 °C to 350 °C temperature range
- Display accuracy of ± 0.2 °C over full range
- Built-in two-channel readout for PRT, RTD, thermocouple, 4-20 mA current
- Optional built-in reference thermometer readout

www.flukecal.com/9143

9144 Field Metrology Well

Precision calibration with fast temperature ramp-up rates for the industrial process environment.

- 50 °C to 660 °C temperature range
- Heat to 660 °C in 15 minutes
- Display accuracy from ± 0.35 °C at 420 °C to ± 0.5 °C at ± 660 °C
- Optional built-in reference thermometer readout

www.flukecal.com/9144

9100S

9102S

9009

9103/9140/9141

9150

6102/7102/7103

Field Temperature Sources

Portable and flexible temperature-controlled dry-wells suitable for high-speed calibrations or certifications of thermocouples, RTDs, PRTs and other temperature sensors.

9100S Handheld Dry-Well

World's smallest, lightest and most portable dry-well.

- Smallest dry-wells in the world
- Ranges from 35 °C to 375 °C
- Accuracy to ± 0.25 °C, stability of ± 0.07 °C at 50 °C

www.flukecal.com/9100S

9102S Handheld Dry-Well

High-performance, convenient and easy-to-use handheld dry-well.

- Smallest dry-wells in the world
- Ranges from –10 °C to 122 °C
- Accuracy to ± 0.25 °C, stability of ± 0.05 °C (full range)

www.flukecal.com/9102S

9009 Dual-Well Dry-Well

Two-in-one drywell increases portability and productivity.

- Temperatures from –15 °C to 350 °C in one unit
- Display accuracy: hot block: ± 0.6 °C; cold block: ±0.2 °C
- Rugged, lightweight, water resistant enclosure

www.flukecal.com/9009

9103 Field Dry-Well

Great performance in a portable instrument.

- –25 °C to 140 °C
- Accuracy to ± 0.25 °C
- Stable to ± 0.02 °C at –25 °C and ± 0.04 °C at 140 °C

www.flukecal.com/9103

9140 Field Dry-Well

Lightweight and portable field dry-well small enough to easily carry in one hand.

- 35 °C to 350 °C
- Accuracy to ± 0.5 °C
- Stability to ± 0.03 °C at 50 °C and ± 0.05 °C at 350 °C

www.flukecal.com/9140

9141 Field Dry-Well

Ultra-fast heat and cool times increase productivity.

- 50 °C to 650 °C
- Accuracy to ± 0.5 °C to 400 °C; ± 1.0 °C to 650 °C
- Heats up to 650 °C in only 12 minutes

www.flukecal.com/9141

9150 Thermocouple Furnace

Convenient, portable thermocouple furnace.

- 150 °C to 1200 °C
- Stability of ± 0.5 °C over full range
- NIST-traceable calibration included
- RS-232 port standard

www.flukecal.com/9150

6102/7102/7103 Micro-Baths

Calibrate a variety of probe diameters—no sleeves required.

- Three models covering temperatures from –30 °C to 200 °C
- World's smallest portable calibration baths
- Stability to ± 0.015 °C

www.flukecal.com/micro-baths

4180/4181

9170/9171/9172/9173

9132

9133

Bench Temperature Sources

Combining bath-level performance with dry-well functionality and precise reference thermometry.

9170/9171/9172/9173 Metrology Wells

Accurate enough for lab use yet rugged and portable.

- Best performing industrial temperature sources in the world (stability as good as ±0.005 °C)
- Immersion depth to 203 mm (8 in)
- Optional ITS-90 reference input reads PRTs to ± 0.006 °C

www.flukecal.com/917X

Ranges	
9170	–45 °C to 140 °C
9171	–30 °C to 155 °C
9172	35 °C to 425 °C
9173	50 °C to 700 °C

Infrared Temperature Sources

Bench and field precision infrared calibrators for accurate and reliable calibrations of IR thermometers.

4180/4181 Precision Infrared Calibrators

Accredited performance for point and shoot calibrations.

- Calibrated radiometrically for meaningful, consistent results
- Accredited calibration included
- Accurate, reliable performance from –15 °C to 500 °C
- Large 152 mm (6 in) diameter target

www.flukecal.com/418X

9132/9133 Field Infrared Calibrators

Precision when you need it for infrared temperature calibration.

- Verify IR pyrometers from –30 °C to 500 °C (–22 °F to 932 °F)
- RTD reference well for contact temperature measurement

www.flukecal.com/913X

1551A Ex/1552A Ex

1523/1524

1502A/1504

1529

Thermometer Standards

Delivering exceptional accuracy, wide measurement range, and designed to go where you work.

1551A Ex/1552A Ex "Stik" Thermometer

The best substitute for precision mercury-filled glass thermometers.

- Accuracy of ± 0.05 °C (± 0.09 °F) over full range
- Intrinsically safe (ATEX and IECEx compliant)
- Two models to choose from (-50 °C to 160 °C or -80 °C to 300 °C)

www.flukecal.com/155X

1523/1524 Handheld Thermometer Readout

Measure, graph and record three sensor types with one tool.

- High accuracy: PRTs: ± 0.011 °C; Thermocouples: ± 0.24 °C; Thermistors: ± 0.002 °C
- A simple user interface to see trends quickly
- Smart connectors to load probe information automatically

www.flukecal.com/152X

1502A/1504 Thermometer Readouts

Best performance thermometers in their price range.

- Single-channel reference thermometers, accurate to ±0.006 °C (meter only)
- Two models to choose from—reading PRTs or thermistors
- Best price/performance package

www.flukecal.com/150X

1529 Four-Channel Thermometer Readout

Lab-quality accuracy on four channels for PRTs, thermistors and thermocouples.

- Accuracy of ±0.0025 °C (meter only)
- Displays eight user-selected data fields from any channel
- Logs up to 8,000 readings with date and time stamps

www.flukecal.com/1529

1620A

Ambient Conditions Monitor

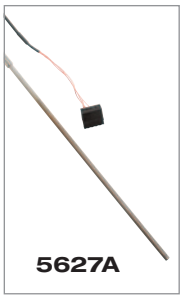
For precise measurement and recording of ambient temperature and humidity conditions wherever calibrations take place.

1620A Precision Thermo-Hygrometer

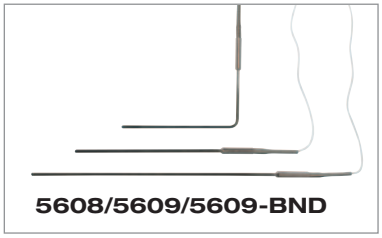
The most accurate temperature and humidity graphical data logger on the market.

- Superior accuracy
- Network enabled
- Powerful logging and analysis tools
- Measures temperature to ± 0.125 °C and humidity to ± 1.5 % on two channels

www.flukecal.com/1620A


5627A


5615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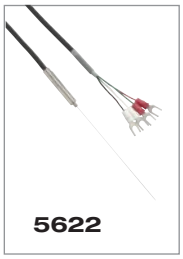
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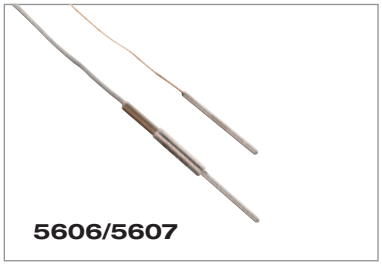
5618B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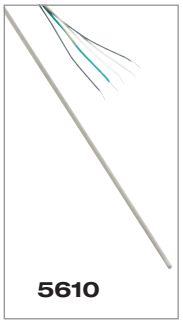
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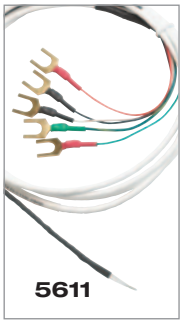

5611


5611T

Precision PRTs

High accuracy reference temperature measurements in temperature sources on the bench or in the field.

5627A Precision Industrial PRT

- Vibration and shock resistant
- NVLAP-accredited calibration included, lab code 200706-0
- Calibration accuracy of ± 0.046 °C at 0 °C

www.flukecal.com/5627

5615 Secondary Reference Temperature Standards

- –200 °C to 420 °C
- Calibrated accuracy ± 0.010 °C at 0 °C
- NVLAP-accredited calibration included, lab code 200706-0

www.flukecal.com/5615

5608/5609/5609-BND Secondary Reference PRTs

Drift rate of ± 0.01 °C at 0 °C after 100 hours at max temperature.

- 5608: –200 °C to 500 °C (80 mm minimum immersion)
- 5609: –200 °C to 670 °C (100 mm minimum immersion)
- Optional, NVLAP-accredited calibration, lab code 200348-0

www.flukecal.com/5608

5622 Fast Response PRTs

- Time constants as fast as 0.4 seconds
- Available as DIN/IEC Class A PRTs or with NVLAP-accredited calibration, lab code 200348-0
- Small probe diameters ranging from 0.5 mm to 3.2 mm (four models available)

www.flukecal.com/5622

5618B Small Diameter Industrial RTD

Fast response for time-dependent measurements.

- Small diameter sheath, 3.2 mm (0.125 in)
- Excellent stability
- Includes ITS-90 coefficients

www.flukecal.com/5618

5606 and 5607 Full Immersion PRTs

Fully immerse PRT transition junction inside freezers or furnaces.

- Transition junction designed to withstand full temperature range of probe
- 5606: -200 °C to 160 °C
- 5607: 0 °C to 450 °C
- Calibration accuracy of ± 0.05 °C (full range)

www.flukecal.com/5606

Thermistors

Providing accurate and rugged temperature measurements from 0 °C to 100 °C.

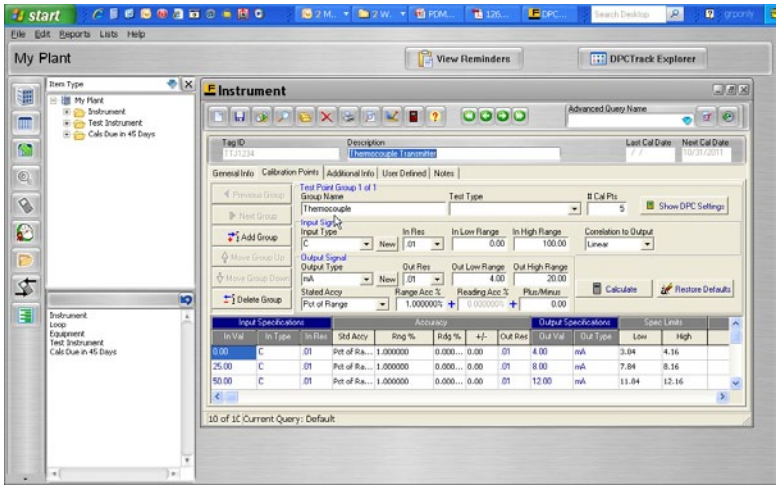
5610/5611/5611T Secondary Reference Thermistor Probes

Economical lab-grade thermistor probes with low drift susceptibility.

- Short-term accuracy to ± 0.01 °C; one-year drift < ± 0.01 °C
- 5610: 3.2 mm diameter stainless steel sheathed thermistor
- 5611: 1.5 mm diameter (tip) silicone coated thermistor
- 5611T: 3 mm diameter (tip) PTFE encapsulated thermistor
- Optional, NVLAP-accredited calibration

www.flukecal.com/5610

Software/ Accessories



Software

750 SW DPC/TRACK2 Software™

DPC/TRACK2 Software is a specialized calibration management database that can help you manage your instrumentation and address the documentation requirements of quality programs and regulations. With DPC/TRACK2 and a 754 DPC you can:

- Manage your inventory of tags and instruments, schedule for calibration
- Create tag specific procedures with instructions and comment
- Load those procedures to your DPC, and later upload the results to your PC
- Select and execute automated as found/as left procedures in the field, automatically capturing results
- Examine the calibration histories of your tags and instruments and print reports
- Import and export instrument data and procedures as ASCII text
- Import legacy DPC/TRACK data

www.fluke.com/750DPCsoftware

700G/Track

Easy-to-use software for managing instruments and calibration data.

- Enables data download and logging configurations to the 700G Series gauges for a remote logging event
- Configure logging event reading rate, duration and measurement units
- Upload measurements logged remotely and display or export measurements

www.fluke.com/700Gsoftware

Log*Ware*

Turn a Fluke Calibration single-channel handheld or 1502A/1504 readout into a real-time data logger.

- Collects realtime data
- Calculates statistics and displays customizable graphs
- Allows user-selected start times, stop times and sample intervals

www.flukecal.com/logware

Accessories

700HTP-2 Hydraulic Test Pump

The 700HTP-2 is designed to generate pressures up to 10,000 psi/700 bar. Use the Fluke 700PRV-1 adjustable relief valves to limit pressures from 1360 psi to 5450 psi. Use the 700HTH-1 test hose to connect from the pump to the device under test.

www.fluke.com/process_acc

700PTP-1 Pneumatic Test Pump

The 700PTP-1 is a handheld pressure pump designed to generate either vacuum to -11.6 psi/-0.8 bar or pressure to 600 psi/40 bar.

www.fluke.com/process_acc

700LTP-1 Low Pressure Test Pump

Hand operated pressure pump designed to generate either vacuum to -13 psi/-.90 bar or pressures to 100 psi/6.9 bar. Ideal for low pressure applications requiring accurate low pressure testing.

www.fluke.com/process_acc

700HTP-2

700PTP-1

700LTP-1

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Fluke Corporation
PO Box 9090,
Everett, WA 98206 U.S.A.

Fluke Europe B.V.
PO Box 1186, 5602 BD
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For more information call:
In the U.S.A. (800) 443-5853 or Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or Fax +31 (0) 40 2675 222
In Canada (800)-36-FLUKE or Fax (905) 890-6866
From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
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