



**FLUKE®**

## Pharmaceutical industry calibration solutions

Pharmaceutical manufacturing requires premium quality tools that provide accurate measurements and keep critical processes up and running. Whether you're maintaining plant uptime, documenting product quality, or calibrating measurement devices, you need accurate tools that you can count on for the bench and the manufacturing floor.

With Process Calibration solutions from Fluke and Fluke Calibration for electrical, multifunction, mA loop, temperature, pressure and flow applications, you can find the right tools for the challenges you face every day.



### Building control technician

Focus: monitoring, adjusting and repairing building controls

#### What issues do you face?

- Troubleshooting building environmental systems with immediate response
- Maintaining uptime and production area cleanliness
- Safety systems testing

#### Fluke solutions:

- ↻ Pressure calibration tools
- Temperature calibration tools

### Quality manager

Focus: maintaining and documenting product quality

#### What issues do you face?

- Complying with quality regulations
- Maintaining documentation of processes

#### Fluke solutions:

- Temperature calibration tools
- ↻ Pressure calibration tools
- ↔ Flow calibration tools
- Multifunction calibration tools

### Engineer

Focus: process design and improvement

#### What issues do you face?

- Specifying equipment to meet regulations and requirements
- Preventing downtime

#### Fluke solutions:

- Temperature calibration tools
- ↻ Pressure calibration tools
- ↔ Flow calibration tools
- ◆ Standards
- ▲ Process tools



### Field calibration and instrumentation technician

Focus: verifying transmitters throughout the plant

#### What issues do you face?

- Preventing downtime
- Troubleshooting process interruptions
- Testing safety systems
- Maintaining product accuracy for regulations and quality

#### Fluke solutions:

- Multi-function and loop tools
- Temperature calibration tools
- ↻ Pressure calibration tools

### Validation technician

Focus: providing validation services

#### What issues do you face?

- Thermal validations and studies
- Authoring and executing validation protocols, and writing reports of validation results

#### Fluke solutions:

- Temperature calibration tools

### Lab calibration technician

Focus: calibrating measurement devices

#### What issues do you face?

- Making accurate measurements
- Documenting procedures
- Increasing throughput

#### Fluke solutions:

- Temperature calibration tools
- ↔ Flow Calibration Tools
- ▲ Electrical Calibration
- Multi-function and loop tools
- ↻ Pressure calibration tools

Diagram is not an exact physical representation. Diagram elements are not to scale and are for illustration purposes only.

## Fluke pharmaceutical solutions

Fluke offers a broader line of solutions for pharmaceutical professionals than shown here. Go to [www.fluke.com/pharma](http://www.fluke.com/pharma) for detailed information on these products and more Fluke pharmaceutical solutions.

Multi-function and loop tools							Temperature calibration tools					Pressure calibration tools						Electrical calibration	Software			
mA loop calibrators			Multifunction calibrators				Baths and dry-wells			Infrared thermometer calibrator	Precision thermometers and probes		Handheld pressure calibrators		Pressure gauges and comparison test pumps			Deadweight testers		Bench pressure controller/calibrator	Precision multimeter	Software solutions
709H Precision HART Loop Calibrator	715 Volt/mA Calibrator	707 Loop Calibrator	726 Precision multifunction calibrator	754 Documenting Process Calibrator- HART	789 ProcessMeter™ with 250 Ohm HART resistor	7526A Precision Process Calibrator	7102 Micro-Bath Thermometer Calibrators	9190A Ultra-Cool Field Metrology Well	914X Field Metrology Wells (temp and mA Loop)	418X Precision Infrared Calibrators (temp)	1523/1524 Handheld Thermometer Readout (temp)	1551A Ex and 1552A Ex "Stik" Thermometer Readout	700P Differential Pressure Mod- ules	719 Portable Electric Pressure Calibrator	700G Precision Pressure Gauge Calibrator	2700G Series Reference Pressure Gauges	P5515 Comparison Test Pumps	P3100 Hydraulic Deadweight Testers	E-DWT-H Electronic Deadweight Tester	PPC4E Pressure Controller/ Calibrator	8845A/8846A 6.5 Digit Precision Multimeters	750 SW DPC/TRACK2 Software

# Recommended pharmaceutical solutions

## Laboratory calibration

### Recommended products:

Field Metrology Wells, Micro-Baths, reference thermometers

Pressure controllers / calibrators

Flow calibrators and standards

Thermo-hygrometers

Infrared calibrators

### Best suited for:

Calibration of RTDs, thermocouples, thermistors, and thermal switches

General calibration of pressure gauges, transducers or transmitters that are normally measuring gas or water pressure

Calibration of gas flow

Environmental monitoring

Infrared thermometer and thermal imager calibration

## Process instrumentation and automation

### Recommended products:

Process calibrators

Field Metrology Wells

Handheld reference thermometers

Data loggers

Loop calibrators and process meters

Milliamp clamp meters

Thermometer standards

Intrinsically safe pressure calibrators

### Best suited for:

Instrument calibration, performing HART transmitter adjustment

Transmitter loop calibrations, automated comparison calibrations of RTDs and thermocouples, or thermal switch tests

Temperature measurement and testing in autoclaves, ovens, freezers, and chambers

Monitoring multiple process parameters over time voltages

Testing 4 to 20 mA analog signals and control system input/output

Troubleshoot and test mA loop control signals. Measure mA I/o signals without breaking the loop.

Reference temperature measurements in fluids, test wells and dry-wells

Calibration and maintenance of pressure instruments in classified areas





**More recommended pharmaceutical solutions**

**Field calibration**

<b>Recommended products:</b>	<b>Best suited for:</b>
<b>IR thermometer calibrators</b>	Infrared thermometer and thermal imager calibration
<b>Field Metrology Wells</b>	Transmitter loop calibrations, comparison calibrations, or thermal switch testing.
<b>Handheld and field dry-wells</b>	Checking the zero and span points of temperature sensors and transmitters
<b>Micro-Baths calibrator</b>	Accommodating probe dimensions while checking the zero and span points of temperature sensors and transmitters
<b>Electronic deadweight testers</b>	Calibration of high pressure gauges, transducers or transmitters
<b>Pressure calibrator with pressure/vacuum pump</b>	Low pressure transducer testing for pressure measurements that feed information to air handlers



**Facilities maintenance**

<b>Recommended products:</b>	<b>Best suited for:</b>
<b>Handheld reference thermometer</b>	Efficiency testing of HVAC systems
<b>Low pressure controller/calibrator, low pressure handheld calibrators</b>	Air handlers, Magnahelics®, low pressure differential gauges
<b>Electronic deadweight testers</b>	Calibration of high pressure gauges, transducers or transmitters
<b>Pressure calibrator with pressure/vacuum pump</b>	Low pressure transducer testing for pressure measurements that feed information to air handlers



**Fluke.** *The Most Trusted Tools in the World.*

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

**Fluke Europe B.V.**  
PO Box 1186, 5602 BD Eindhoven, The Netherlands

**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  
Web access: <http://www.fluke.com>

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