

**FLUKE®**

Calibration

# 6332A / 7342A Temperature Calibration Baths

Fast, 0.01 °C stability baths  
backed by Fluke metrology





## 450 mm deep tank for calibrating PRTs, thermistors, thermocouples, and liquid-in-glass thermometers

The 6332A / 7342A Calibration Baths are ideal for lab managers and technicians in government, corporate, and independent calibration labs who need a bath with good stability, uniformity, and speed to temperature for calibrating thermometers and sensors of various sizes and shapes.

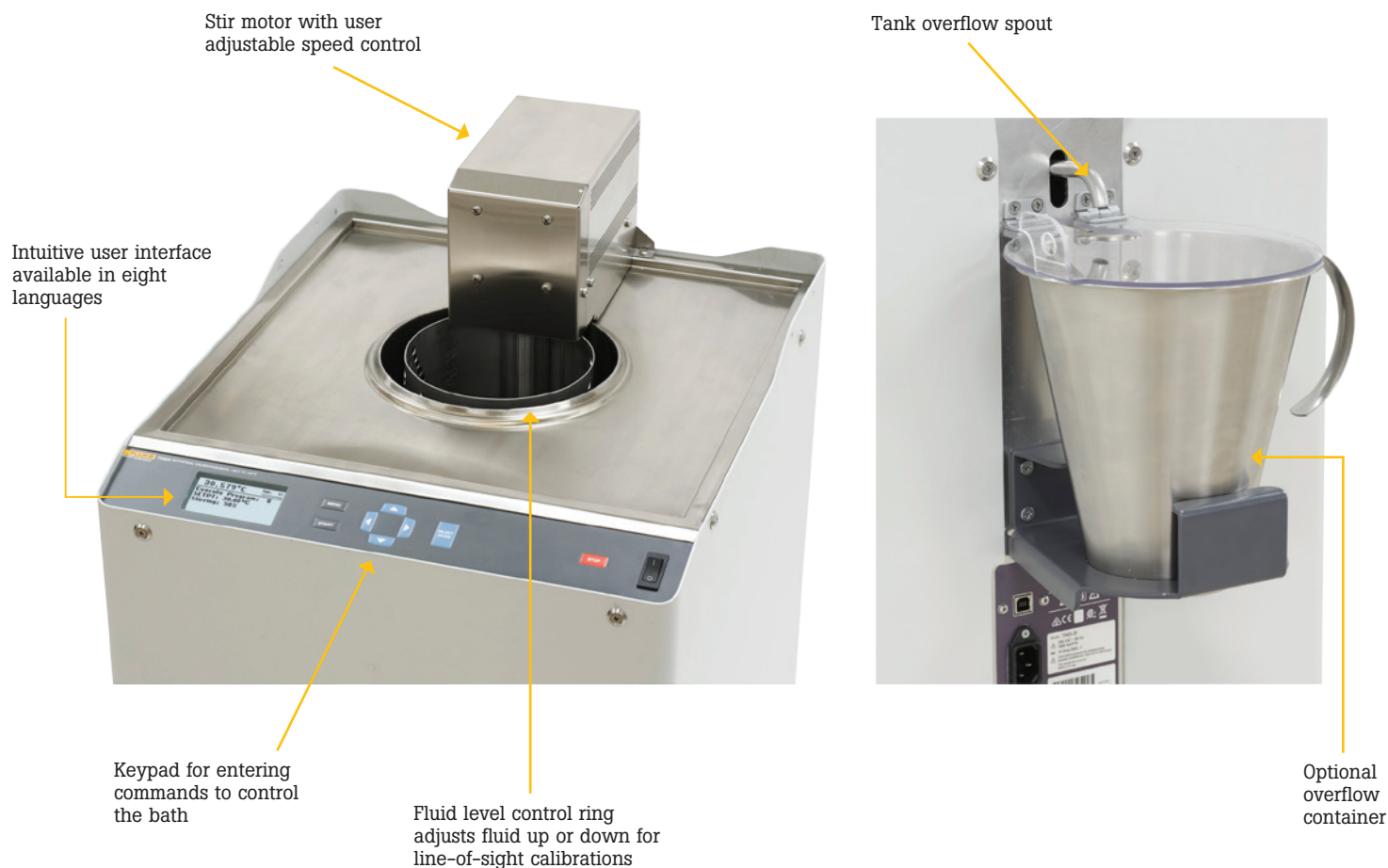
Two models cover a wide temperature range from  $-40^{\circ}\text{C}$  to  $300^{\circ}\text{C}$ . These baths offer a large 145 mm tank diameter with plenty of immersion depth required to calibrate industrial PRTs, thermistors, thermocouples, sanitary sensors, transmitters, and liquid-in-glass thermometers.

The 6332A / 7342A baths are designed for the customer who wants a quality bath backed by Fluke metrology at an affordable price. These baths give you secondary standards level performance, quality design that's built to last, and many features and accessories that improve lab efficiency and productivity.

### Key features

- Wide temperature range
  - 6332A:  $50^{\circ}\text{C}$  to  $300^{\circ}\text{C}$
  - 7342A:  $-40^{\circ}\text{C}$  to  $150^{\circ}\text{C}$
- Stability  $0.01^{\circ}\text{C}$
- Uniformity (working area)
  - 6332A:  $0.015^{\circ}\text{C}$  ( $50^{\circ}\text{C}$  to  $200^{\circ}\text{C}$ ),  $0.02^{\circ}\text{C}$  ( $201^{\circ}\text{C}$  to  $300^{\circ}\text{C}$ )
  - 7342A:  $0.01^{\circ}\text{C}$  (full range)
- Fast heating and cooling times: Heating rate maximum  $1.8^{\circ}\text{C}/\text{minute}$ . Cooling rate maximum  $1.1^{\circ}\text{C}/\text{minute}$ .
- Large tank area: diameter 145 mm (5.7 inches) by depth 450 mm (17.7 inches)
- Programmable setpoint temperatures and ramp rates
- Adjustable fluid level
- Temperature stability indicator lets you know when the bath is ready to use

## 6332A / 7342A overview



<p><b>MAIN MENU</b></p> <hr/> <p><b>Program Setup</b></p> <hr/> <p><b>Instrument Setup</b></p> <hr/> <p><b>Service</b></p>	<p><b>-35.11°C</b> <b>PWR: 100%</b></p> <hr/> <p><b>Execute Program: 1</b></p> <hr/> <p><b>SETPT: 0.00°C</b></p> <hr/> <p><b>Stirring: 100%</b></p>
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The main display shows bath summary information – temperature, heater duty cycle (0 % to 100 %), temperature stability indicator, program mode, setpoint temperature, stir motor speed (30 % to 100 %).





## Performance, automated controls, and accessories make a high value combination

### **Stability and uniformity for accurate calibrations over a wide temperature range**

The Fluke 6332A and 7342A feature good stability and uniformity for accurate and dependable temperature sensor calibration.

Whether you are calibrating at low or high temperatures, one of these baths has a range to cover a wide workload of temperature sensors. The model 6332A has a temperature range of 50 °C to 300 °C. The model 7342A has a temperature range of -40 °C to 150 °C.

### **Fast to temperature and stabilization**

These baths feature a heating rate up to 1.8 °C/minute and cooling rate up to 1.1 °C/minute, depending on model and fluids used. They stabilize in 20 minutes. You'll spend less time waiting and more time calibrating.

### **Versatile design and technology features improve lab efficiency and productivity**

With a large tank diameter of 145 mm (5.7 inches) and a depth of 450 mm (17.7 inches), the 6332A and 7342A can accommodate a wide variety of sensor sizes. An optional probe holding fixture holds probes at the correct height and an optional shelf lets you place a temperature readout nearby.

The adjustable fluid level feature lets you raise or lower the fluid level to calibrate line-of-sight liquid-in-glass (LIG) thermometers or shorter sensors.

These baths accommodate a variety of fluids, including silicone oils, ethylene glycol, Dynalene, HFE fluid or Halocarbon 0.8 oil. When choosing a fluid, consider its characteristics, including temperature range, viscosity, thermal expansion, and fluid lifetime. Your Fluke Calibration representative will be happy to discuss your application and help you choose the right fluid.

The front panel display is easy to use, thanks to an intuitive series of menu selections and your choice of eight languages: English, Chinese, Korean, Spanish, Portuguese, French, German, and Russian. Enter commands and navigate the menus via a keypad next to the display. A stability indicator on the display shows when the bath has stabilized and is ready for temperature measurement.

Want your bath to be ready when you get to work in the morning? Auto Start lets you program the 6332A and 7342A to start automatically at a specific date and time. You can also program setpoint temperature and ramp rates – up to ten programs.

### **Automate for improved throughput and convenience**

Automate the 6332A and 7342A baths by combining with the 1586A Super-DAQ Precision Temperature Scanner. Improve lab efficiency and free time for other important tasks. Be confident results are consistent no matter who does the job.



**FLUKE**®

Calibration

## Backed by Fluke Calibration

Fluke Calibration provides comprehensive and clear specifications for the 6332A and 7342A baths that give the assurance these baths will perform as specified over the full temperature range, with a variety of fluids, and throughout the entire working volume. Competing baths provide partial or confusing specifications making it difficult to know how they will perform in a particular application. Calibrate with confidence using Fluke Calibration baths with comprehensive specifications.

Need assistance? Fluke Calibration offers world-class support both before and after the sale, via online chat, email, telephone and through our service organizations. Gold and Silver CarePlans are also available for priority and extended service. Rest easy knowing the value of your investment will be preserved now and into the future.



6332A Bath  
50 °C to 300 °C



7342A Bath  
-40 °C to 150 °C



## A variety of options lets you configure your bath to fit your working environment

### Available accessories



#### Readout Shelf Fixture

The Readout Shelf Fixture accommodates a variety of Fluke Calibration thermometer readouts, keeping them conveniently close at hand yet safely out of the way.



#### Adjustable Probe Holding Fixture

The Adjustable Probe Holding Fixture holds and aligns thermometer probes in the bath. It's adjustable vertically to accommodate different probe lengths and immersion depths. It even enables you to position liquid-in-glass thermometers so you can view them during the calibration.



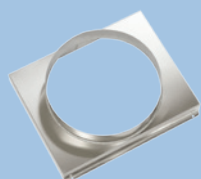
#### Fluid Overflow Kit

Thermal expansion can cause bath fluid to flow over the top of the tank. The Fluid Overflow Kit installs on the back of the bath and catches expanding fluid from the overflow spout. No more messy lab spills.



#### Floor Cart

Need to move your bath to different locations? The Floor Cart has four swivel casters that enable you to move the bath easily. Two of the casters are locking so you can keep the bath in place while using it.



#### Condenser Hot Air Duct Fixture

The Condenser Hot Air Duct Fixture (Fluke 7342A only) provides a mounting location for a flexible duct hose (not included) so that hot air from the condenser can be moved to a laboratory's ducting system in controlled environments.

## Summary specifications

### Temperature specifications

	6332A	7342A
Range (at 23 °C ambient temperature)	50 °C to 300 °C	–40 °C to 150 °C
Maximum Display Error	1.0 °C	1.0 °C
Temperature Stability	0.01 °C	0.01 °C
Temperature Uniformity (working area)	0.015 °C, 50 °C to 200 °C 0.02 °C, 201 °C to 300 °C	0.01 °C (full range)
Heating Time	25 °C to 300 °C (silicone oil, 710): 165 min	–40 °C to 25 °C (ethanol): 35 min 25 °C to 150 °C (silicone oil, 200.50): 75 min
Cooling Time	300 °C to 80 °C (silicone oil, 710): 825 min	150 °C to 25 °C (silicone oil, 200.50): 110 min 25 °C to –40 °C (ethanol): 135 min
Stabilization Time	20 minutes	20 minutes
Factory Calibration	Limited range calibration traceable to the SI through a national metrology institute	

For full product specifications, please refer to the 6332A/7342A Specifications document posted at [www.flukecal.com](http://www.flukecal.com)

### General specifications

Size	Height: 1080 mm (42.5 in) Width: 445 mm (17.5 in) Depth: 495 mm (19.5 in)
Weight	6332A: 26 kg (57.3 lb) 7342A: 50 kg (110.2 lb)
Fluid Volume	12 liters (3.2 gallons)
Inner Tank Diameter	145 mm (5.7 in)
Maximum Fluid Depth	450 mm (17.7 in)

## Ordering Information

### Models

6332A: Isothermal Calibration Bath, 50 °C to 300 °C

7342A: Isothermal Calibration bath, -40 °C to 150 °C

### Accessories

7342-2090:	Readout Shelf Fixture
7342-2050:	Adjustable Probe Holding Fixture
7342-2080:	Fluid Overflow Kit
7342-2070:	Floor Cart
7342-2027-AL:	Aluminum Equilibration Block
6332-2082-A:	Bath Cover, stainless steel with holes
6332-2082-B:	Bath Cover, stainless steel without holes
7342-2007:	Condenser Hot Air Duct Fixture (7342A only)
2069:	Magnifying Scope for Liquid-in-Glass Thermometer Calibration

## The broadest range of calibration solutions

Fluke Calibration provides the broadest range of calibrators and standards, software, service, support and training in electrical, temperature, humidity, pressure, RF and flow calibration.

Visit **[www.flukecal.com](http://www.flukecal.com)** for more information about Fluke Calibration products and services.

**Fluke Calibration.** *Precision, performance, confidence.™*

Electrical	RF	Temperature	Humidity	Pressure	Flow	Software
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