

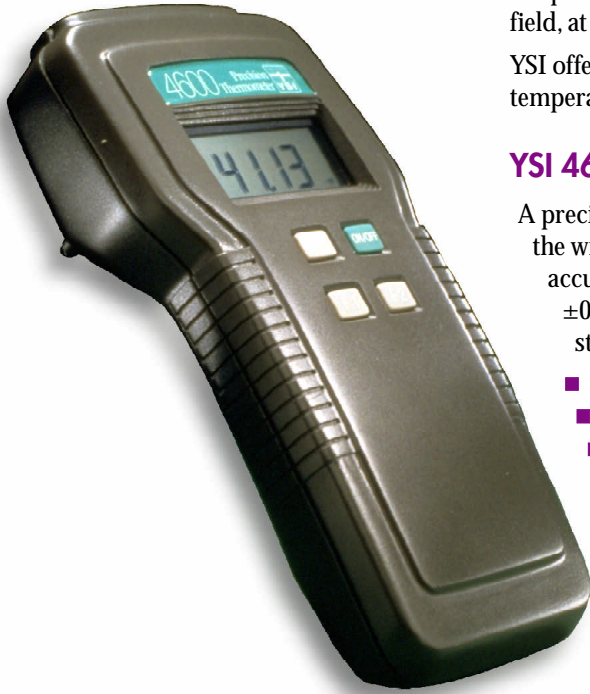


## YSI 4600 Series Precision™ Thermometers

### Precision Temperature Measurement in a Handheld Unit You Can Afford

Handheld YSI 4600 Series Precision™ Thermometers take metrology-level temperature measurement to the laboratory, the manufacturing floor, and the field, at an affordable price.

YSI offers three versions of the thermometer to address a broad range of temperature measurement applications:



### YSI 4600 – High Accuracy

A precision thermometer for use with standard YSI 400 Series Probes over the wide range  $-40$  to  $+150^{\circ}\text{C}$ . Ideal for applications requiring high system accuracy and application flexibility, the instrument offers high accuracy,  $\pm 0.115^{\circ}\text{C}$ , from  $0$  to  $50^{\circ}\text{C}$ ; system accuracy is  $\pm 0.115^{\circ}\text{C}$  with over 20 styles of YSI 400 Series Probes.

- Stainless steel tubular
- Air/gas
- Vinyl tip
- Catheter

### YSI 4610 – Higher Accuracy with Interchangeable Probes

Specifically designed for applications in which high accuracy and interchangeability are required across the biomedical temperature range. Also used for any other applications requiring high sensitivity over a temperature range of  $0$  to  $70^{\circ}\text{C}$ . System accuracy is  $\pm 0.05^{\circ}\text{C}$  from  $20$  to  $50^{\circ}\text{C}$  with two special probes – a small diameter, stainless steel probe and a vinyl tip general-purpose probe.

- Biomedical
- Analytical instrument calibration
- Field service
- Process validation
- Data acquisition

### YSI 4600S – Transfer Standard

Offers metrology-level accuracy over user-defined temperature ranges. Each system is calibrated with a matched probe (built using a YSI 46000 Super-Stable Glass Thermistor) appropriate for your application. Single-point and 4-point NIST-traceable calibrations are available. System accuracy as tight as  $\pm 0.025^{\circ}\text{C}$  between  $0$  to  $50^{\circ}\text{C}$  is obtainable with a 4-point calibration. Contact YSI for calibration details.

- Metrology labs
- Testing labs
- Critical process monitoring
- Transfer standard

The Temperature  
Standard,  
Planetwide.™

*All versions include the following features:*

- Resolution to  $0.01^{\circ}\text{C}$
- RS-232 port
- NIST traceability
- $^{\circ}\text{F}$  or  $^{\circ}\text{C}$  readout
- Hold
- Min/max
- T
- Store



The Temperature  
**Standard,**  
Planetwide.™

To order or for more  
information, contact  
your local represen-  
tative or the YSI  
Temperature customer  
service team.

**937 427-1231**  
**ext. 770**

800 747-5367 U.S. only

[www.YSI.com](http://www.YSI.com)

**YSI Temperature**

2670 Indian Ripple Road  
Dayton, Ohio 45440-3605  
USA  
937 427 1231  
Fax 937 427 1640

Victory/YSI Incorporated  
118 Victory Road  
Springfield, NJ 07081-0710  
USA  
973 379 5900  
Fax 973 379 5982

**YSI Temperature—Japan**

Nikkiso-YSI Co., Ltd.  
Tokyo, Japan  
(0422) 37-9811  
Fax (0422) 37-9820

**ISO 9001**  
**ISO 14001**

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Who's Minding  
the Planet?™

For more information on YSI's full line of products,  
accessories and services, as well as application notes,  
FAQs, troubleshooting, and more, check our  
information-packed website at [www.YSI.com](http://www.YSI.com).

**YSI 4600 Series Specifications**

**YSI 4600 Thermometer** (System accuracy with YSI 400 Series Probes)

<b>Accuracy and Temperature Range</b>	±0.350° C at -40° C
	±0.115° C from 0 to 50° C
	±0.125° C at 70° C
	±0.275° C at 100° C
	±0.720° C at 150° C

**YSI 4610 Thermometer** (System accuracy with YSI 4610 Series Probes)

<b>Accuracy and Temperature Range</b>	±0.05° C from 20 to 50° C
	±0.1° C at 0° C
	±0.1° C at 70° C

**YSI 4600S Thermometer** (System accuracy with YSI Configure-to-Order Probe, using 4-point calibration)

<b>Accuracy and Temperature Range</b>	±0.025° C from 0 to 50° C
	System accuracy from -40 to 125° C depends on specified calibration
<b>Resolution</b>	0.01° C from -40 to +102° C
	0.02° C from 102 to 150° C
<b>Repeatability</b>	0.0002 to 0.01° C (-20 to 100° C) typical for one week at constant ambient temperature
<b>Reading Rate</b>	2 readings per second
<b>Display</b>	4 1/2-digit LCD
<b>Battery Life</b>	20 hours typical (9V alkaline cell included)
<b>Battery Indicator</b>	Displays flashing battery symbol when less than 5% of life remains
<b>Temperature Units</b>	°F or °C selected from keypad
<b>Auto Shutoff</b>	10 minutes with battery power and no RS-232 communications
<b>Mating Connection</b>	1/4" phone jack for probes; 9-pin RS-232 serial output
<b>Operating Conditions</b>	10 to 40° C; 0 to 85% RH
<b>Size</b>	21h x 10w x 3.8d cm, 0.34 kg; 25h x 4.00w x 1.50d inches, 12 oz

**YSI 4600 Series Accessories**

- YSI 4651 RS-232 Cable
- YSI 4652 Carrying Case
- YSI 4654 Tripod
- YSI 4661 Battery Eliminator, US

- YSI 409B Surface Probe
- YSI 421 Autoclavable Surface Probe
- YSI 427 Small Surface Probe
- YSI 405 Air/Gas Probe
- YSI 451 1-mm Flexible General-Purpose Probe

**YSI 400 Series Probes for YSI 4600 Thermometer**

- YSI 401 Vinyl Tip General Purpose Probe
- YSI 402 Small Vinyl Tip General Purpose Probe
- YSI 403 Stainless Steel Tubular Probe
- YSI 404 Glass Tubular Probe
- YSI 406 Small SS Tubular Probe
- YSI 410 Tubular Probe with NPT Fitting
- YSI 416 Autoclavable Tubular Probe
- YSI 418 Pointed Tubular Probe
- YSI 408 Banjo Surface Probe
- YSI 409A High-Temperature Surface Probe

**YSI 4610 Series Probes for YSI 4610 Thermometer**

- YSI 4611 1-mm Flexible General-Purpose Probe
- YSI 4612 Small Flexible General-Purpose Probe

**YSI Configure-to-Order Probes for YSI 4600S Thermometer**

For optimal long-term performance, we recommend using YSI 46000 Super-Stable Glass Thermistors. These thermistors are available in some Configure-to-Order Probe styles. Call YSI Customer Service for details.

**About Calibration**  
We provide every YSI temperature product with a Certificate of Traceability, indicating that it was calibrated during manufacture with standards traceable to the National Institute of Standards and Technology.