

TECHNICAL DATA

5626, 5628 | Secondary Standard PRTs







Key features

- Designed for high-temperature applications, up to 661 °C.
- Meet all ITS-90 requirements for resistance ratios.
- Exhibit an R_{tp} drift of less than 20 mK after 500 hours at 661 °C.
- Calibrated accuracy of ± 0.006 °C at 0 °C.

Product overview: 5626, 5628 | Secondary Standard PRTs

If you're using block calibrators, furnaces, or temperature points above normal PRT (platinum resistance thermometer) temperatures (420 °C), then these two PRTs are for you. The Fluke 5626 is nominally 100 Ω and the 5628 (formerly Hart Scientific) is nominally 25.5 Ω. Both instruments have a temperature range of -200 °C to 661 °C. They make great working or check standards for calibration work up to the aluminum point.

Using a regular PRT at temperatures above 500 °C exposes the platinum to contamination. If the PRT is used as a reference or calibration standard, contamination is a major problem. SPRTs (standard platinum resistance thermometers), which are more expensive and delicate, can handle the higher temperatures, but with greater risk to the instrument due to shock, contamination, or mishandling. The 5626 and 5628 are designed to reduce the contamination risk through the use of internal protection while not impairing performance.

In addition to the right measurement performance and durability, a PRT for secondary applications should be priced affordably. Fluke Calibration's new PRTs are inexpensive and come with an accredited calibration. The calibration comes complete with ITS-90 constants and a resistance-versus-temperature table.

Check the temperature range, check the stability, check the price! Who else gives you this much quality, performance, and value for your money? No one!

Specifications: 5626, 5628 | Secondary Standard PRTs

Specifications	
Temperature Range	-200 °C to 661 °C
Handle Temp.	0 °C to 80 °C
R_{TPW}	5626: 100 Ω (± 1 Ω) 5628: 25.5 Ω (± 0.5 Ω)
Resistance Ratio W(Ga)	W(302.9146K) □ 1.11807 α □ 0.003925
Calibrated Accuracy[†] (k=2)	± 0.006 °C at -200 °C ± 0.006 °C at 0 °C ± 0.015 °C at 420 °C ± 0.022 °C at 661 °C
Stability	5626: ± 0.003 °C 5628: ± 0.002 °C
Long-Term Drift (k=2)	5626: < 0.006 °C/100 hours at 661 °C 5628: < 0.004 °C/100 hours at 661 °C
Immersion	At least 12.7 cm (5 in) recommended
Sheath	Inconel™ 600
Lead Wires	4-wire Super-Flex PVC, 22 AGW
Termination	Gold-plated spade lugs, or specify
Size	6.35 mm dia. x 305 mm, 381 mm, or 508 mm (0.25 x 12, 15, or 20 in) standard, custom lengths available
Calibration	Accredited calibrations from Fluke Calibration
[†] Includes calibration and 100 hr drift	

Ordering information



5626, 5628 Secondary Standard PRTs

Secondary Standard PRTs

5626-20-X

High-temp PRT, 100 Ω , 508 mm (20 in) Includes case

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

5628-20-X

High-temp PRT, 25.5 Ω , 508 mm (20 in) Includes case

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

5626-12-X

Secondary Standard PRT (0.25 in dia x 12 in), 100 Ω , -200 $^{\circ}\text{C}$ to 661 $^{\circ}\text{C}$

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

5626-15-X

Secondary Standard PRT (0.25 in dia x 15 in), 100 Ω , -200 °C to 661 °C

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

5628-12-X

Secondary Standard PRT (0.25 in dia x 12 in), 25.5 Ω , -200 °C to 661 °C

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

5628-15-X

Secondary Standard PRT (0.25 in dia x 15 in), 25.5 Ω , -200 °C to 661 °C

(17025 accredited calibration included. Traceable to NIST standards.)

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).



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