

Secondary standard PRTs



- Range to 661 °C
- Calibrated accuracy of ± 0.006 °C at 0 °C
- R_{TPW} drift < 20mK after 500 hours at 661 °C

Hart's high-temp secondary standards fill the gap between affordable, but temperature-limited secondary PRTs and more expensive, highly accurate SPRTs.

If you're using block calibrators, furnaces, or temperature points above normal PRT temperatures (420 °C), then these two PRTs are for you. The 5626 is nominally 100 Ω and the 5628 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, 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. Hart'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

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|--|---|
| 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) |
| W(Ga) | ≥ 1.11807 |
| 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 calibration from Fluke Hart Scientific |

[†]Includes calibration and 100 hr drift

Ordering Information

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| 5626-12-X | High-temp PRT, 100 Ω , 305 mm (12 in) |
| 5626-15-X | High-temp PRT, 100 Ω , 381 mm (15 in) |
| 5626-20-X | High-temp PRT, 100 Ω , 508 mm (20 in) |
| 5628-12-X | High-temp PRT, 25.5 Ω , 305 mm (12 in) |
| 5628-15-X | High-temp PRT, 25.5 Ω , 381 mm (15 in) |
| 5628-20-X | High-temp PRT, 25.5 Ω , 508 mm (20 in) |
| 2609 | Spare Case |

Appropriate case included with purchase of 5626 or 5628 PRT.

X = termination. Specify "A" (INFO-CON for 914X), "B" (bare wire), "D" (5-pin DIN for Tweener Thermometers), "G" (gold pins), "I" (INFO-CON for 1521 or 1522), "J" (banana plugs), "L" (mini spade lugs), "M" (mini banana plugs), "P" (INFO-CON for 1523 or 1524), or "S" (spade lugs).

