



Portable Lab Dry-Wells

Models 9007 and 9023

- Designed for on-ship and on-the-go lab applications
- Two models covering -40° C to 650° C
- Includes three-inch and six-inch calibration zones

These calibrators, designed for the U.S. Navy, cover temperatures from -40° C to 650° C, deliver the performance you'll only find in true lab standards, and come in a totally portable case. If your work involves ocean vessels, aircraft, or service trucks, Hart's Portable Lab Dry-Wells were designed for you.

The 9007 covers -40° C to 140° C. No external cooling is needed, so you get -40° C in normal ambient. Set-point accuracy is $\pm 0.15^{\circ}$ C and stability is better than $\pm 0.02^{\circ}$ C.

For hotter temperatures, the 9023 extends from 35° C to 650° C. Heating time is only 45 minutes to 650° C. Set-point accuracy is $\pm 0.3^{\circ}$ C to 450° C and $\pm 0.5^{\circ}$ C to 650° C. Stability is better than $\pm 0.08^{\circ}$ C even at 600° C. (The 9023 is only available in quantities. Please call for availability.)

These dry-wells come with a unique calibration at the full, six-inch depth of the well and at a three-inch depth for short probes. Coefficients for each calibration are stored in the dry-well and can be easily selected from the top-panel control buttons to match the length of the probe being tested.

Both models are encased in all-aluminum enclosures that are durable, waterproof, and meet the standards of MIL-T-28800. Each unit comes with both RS-232 and IEEE-488 interface connections. A wide variety of inserts are available covering probe diameters from 1/16" (1.6 mm) to 7/8" (22 mm).

Specifications

Range	9007: -40° C to 140° C at 25° C 9023: 35° C to 650° C
Accuracy	9007: $\pm 0.15^{\circ}$ C 9023: $\pm 0.3^{\circ}$ C to 450° C, $\pm 0.5^{\circ}$ C to 650° C
Stability	9007: $\pm 0.02^{\circ}$ C 9023: $\pm 0.08^{\circ}$ C
Heating Times	9007: 25° C to 140° C: 20 min. 9023: 25° C to 650° C: 45 min.
Cooling Times	9007: 25° C to -40° C: 25 min. 9023: 650° C to 100° C: 150 min.
Stabilization	10 minutes
Test Wells	9007: 3/4" dia. x 6" deep 9023: 1" dia. x 6" deep
Communications	RS-232 and IEEE-488
Enclosure	Meets Type II, Class 3, Style D requirements of MIL-T-28800
Power	9007: 115 VAC ($\pm 10\%$), 3 A or 230 VAC ($\pm 10\%$), 1.5 A, switchable, 50/60 Hz, 560 W 9023: 115 VAC ($\pm 10\%$), 7 A or 230 VAC ($\pm 10\%$), 3.4 A, specify, 50/60 Hz, 800 W
Size	13.8" H x 10.8" W x 16.9" D (35.1 x 27.4 x 42.9 cm)
Weight	36 lbs. (16.3 kg)
NIST-Traceable Calibration	9007: Data at -40° C, 0° C, 25° C, 75° C, and 140° C; 9023: Data at 50° C, 100° C, 200° C, 300° C, 400° C, 500° C, and 650° C



See our calibration and data acquisition software packages on page 74.

Ordering Information

9007	Portable Lab Dry-Well, -40° C to 140° C, 1/4" insert	9023	Portable Lab Dry-Well, 35° C to 650° C, 1/4" insert
3107-2000	Blank insert	3123-2131	Blank insert
3107-2063	1/16" Insert (1.6 mm)	3123-2125	1/8" Insert (3.2 mm)
3107-2125	1/8" Insert (3.2 mm)	3123-2156	5/32" Insert (4 mm)
3107-2156	5/32" Insert (4 mm)	3123-2188	3/16" Insert (4.8 mm)
3107-2188	3/16" Insert (4.8 mm)	3123-2250	1/4" Insert (6.35 mm)
3107-2250	1/4" Insert (6.35 mm)	3123-2313	5/16" Insert (7.9 mm)
3107-2313	5/16" Insert (7.9 mm)	3123-2375	3/8" Insert (9.5 mm)
3107-2375	3/8" Insert (9.5 mm)	3123-2500	1/2" Insert (12.7 mm)
3107-2500	1/2" Insert (12.7 mm)	3123-2625	5/8" Insert (15.9 mm)
3107-2625	5/8" Insert (15.9 mm)	3123-2750	3/4" Insert (19 mm)
3107-2901	1 User-Specified Hole	3123-2875	7/8" Insert (22 mm)
3107-2902	2 User-Specified Holes	3123-2901	1 User-Specified Hole
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