



TEMPERATURE PRODUCTS

6020T–Premium
6020T–Standard
Accessories



6020T SHOWN

6020T – Premium

- Best Accuracy ± 0.015 ppm from 1 Ω to 10 k Ω
- Quick Measure Mode Under 20 Seconds to First Reading
- Current Reversal Rate of 2 Seconds
- Measurement Rates as Fast as 0.1 Seconds
- ADCC Technology
- 0.1 Ω to 100 k Ω Range
- Linearity < 0.005 ppm
- IEEE-488 and Manual Operation

6020T – Standard

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TEMPERATURE MEASUREMENT

The AccuBridge® 6020T Thermometry Bridge (furthermore 6020T) is the metrologist's choice for primary lab level thermometry measurements. With its innovative technology, the 6020T's speed, measurement accuracy, and data handling capabilities make it the preferred primary thermometry measurement system in National Measurement Institutes (NMIs) and other primary labs worldwide. The 6020T was designed for flexibility and ease of use. The 6020T features increased ampere-turn (AT) sensitivity with more turns on both the master and slave windings and a voltage feedback circuit to improve on the linearity error of the nanovolt amplifier. Also improved is the ratio from previous 1.5:1 ratios to the new ratio range covering from 0.1 up to a maximum ratio of 5 allowing customers to meet all of their requirements. MI customers now have unmatched features and functionality to support its world-class measurement uncertainty capability. Quick Measure Mode provides customers with the ability to have the first reading within 20 seconds from pressing start; current reversal rates improved to 2 seconds with measurement sample times as low as 0.1 seconds! Only MI offers a DC Bridge with these improvements that can meet specifications! Features for years, customers have been asking for MI to extend the measurement features of the DC Comparator Bridge to replace existing AC technology. MI has finally not only answered these requests with the release of the 6020T, but taken them to the next level.

Model	6020T – Premium			6020T – Base		
Current Reversal Minimum (s)	2			2		
Sample Rate Minimum (s)	0.1			0.1		
R_s value (Ω)	Accuracy of Ratio* ($\times 10^{-6}$)			Accuracy of Ratio* ($\times 10^{-6}$)		
	1:1	5:1	1:5	1:1	14:1	1:14
0.1 to < 1	0.015	0.015	0.02	0.07	0.07	0.07
1 to < 10	0.015	0.015	0.02	0.07	0.07	0.07
10 to < 100	0.015	0.015	0.02	0.07	0.07	0.07
1 k to < 10 k	0.015	0.015	0.02	0.07	0.07	0.07
10 k to < 100 k	0.1	0.1	0.2	0.15	0.15	0.2

*Ratio define as (R_{PRT} / R_s)

Measurement Mode	4-Wire
Linearity	< 0.005 ppm of full-scale
Operating Conditions	10 °C to 35 °C, 10 % to 90 % RH non-condensing
Test Current Range	1 μ A to 200 mA
Test Current Resolution	18-bit
Interface	IEEE-488
Display	Touch Screen Display (No external keyboard), Resolution 0.001 ppm

Metrology is Our Science, Accuracy is Our Business™



TEMPERATURE ACCESSORIES

AIR BATHS



9300S SHOWN

9300S

- Volume 53 litres
- Range +15 °C to 50 °C
- Stability ± 0.005 @ 23 °C
- Peltier cooled
- Fast heating/cooling rate
- Stainless steel construction
- Perfect for temperature coefficient measurements

9300A

- Volume 106 litres
- Range +15 °C to 40 °C
- Stability ± 0.005 @ 23 °C
- Peltier cooled
- Fast heating/cooling rate
- Stainless steel construction
- Perfect for temperature coefficient measurements



9300A SHOWN

9300

- Volume 50 litres
- Range 15 °C to 40 °C
- Stability ± 50 mK for ± 1 °C
- Peltier cooled
- Fast heating/cooling rate
- Temperature band protection
- Perfect for temperature



9300 SHOWN



TEMPERATURE ACCESSORIES STANDARD RESISTORS



9210A SHOWN

9210A Series

- 1 Ω Resistor with Carrying Case
- Replacement for Thomas 1 Ω
- Temperature Coefficient $< 0.05 \times 10^{-6}/^{\circ}\text{C}$
- Long Term Drift $< 0.2 \times 10^{-6}/\text{Year}$
- No Pressure Coefficient
- Maximum Dissipation 100 Milliwatts
- Highest Performance Dissipation 10 Milliwatts

9210B Series

- Decade Values 10 Ω , 100 Ω , 1 k Ω , 10 k Ω , 100 k Ω with Optional Carrying Case
- Temperature Coefficient $< 2 \times 10^{-7}/^{\circ}\text{C}$
- Long Term Drift $< 2 \times 10^{-7}/\text{Year}$
- No Pressure Coefficient
- Maximum Dissipation 300 Milliwatts
- Highest Performance Dissipation 10 Milliwatts



9210B SHOWN



9331R SHOWN

9331R Series

- High Stability
- 0.1 Ω to 100 M Ω
- Operating Range 18 $^{\circ}\text{C}$ to 28 $^{\circ}\text{C}$
- Custom Values Available
- Metal Foil Technology
- Ultra Low Temperature Coefficient