

## Altek Temperature Calibrators

### RTD Calibrators

- Source and Read Pt RTDs
- 8 RTD Types Plus Ohms (Model 211)
- 0.1° and 0.01Ω Resolution
- °C/°F Display
- Easy Dial Setting
- Small and Lightweight

111



The Model 111 simulates and measures 3-wire, 100Ω Platinum RTDs over the full industrial temperature range. The Model 211 handles multiple RTD types in either 3 or 4 wire configurations, plus extended ohms range.

### Thermocouple Calibrators

- Source and Read Modes
- 0.1° and 0.001mV Resolution
- °C/°F Display
- Easy Dial Setting
- Small and Lightweight

322-1



Simulate and measure the most popular thermocouple types with the Model 322-1. Use the Model 422 with 14 different types. Three output memories for each TC type facilitate repetitive testing. Each model accepts miniature thermocouple connectors and direct thermocouple wires.

### SPECIFICATIONS

#### MODEL 111

RTD Type	100Ω Pt (DIN/IEC/JIS), 385 alpha
Accuracy	-200.0 to 200.0°C (-328.0 to 212.0°F) ±0.5°C (±0.9°F)
	200.0 to 700.0°C (212.0 to 750.0°F) ±0.6°C (±1.0°F)
	700.0 to 850.0°C (750.0 to 1562.0°F) ±0.7°C (±1.2°F)

#### MODEL 211

RTD Type	Alpha	Range
Pt100 (DIN/IEC/JIS)	3850	-200.0 to 850.0°C (-328.0 to 1562.0°F)
Pt100 (JIS 1981)	3916	-200.0 to 648.9°C (-328.0 to 1200.0°F)
Pt100 (Burns)	3902	-195.6 to 648.9°C (-320.0 to 1200.0°F)
Pt100 (US lab)	3926	-200.0 to 862.0°C (-328.0 to 1584.0°F)
Pt1000 (HVAC)	3750	-184 to 275°C (-300 to 527°F)
Cu10 (Minco)	4274	-200 to 260°C (-328 to 500°F)
Ni120	6720	-80.0 to 273.0°C (-112.0 to 524.0°F)
Ni110	5801	-106.7 to 315.6°C (-160.0 to 600.0°F)
Accuracy (typical)	Pt100	±0.15°C (±0.25°F)
	Pt1000, Ni	±0.10°C (±0.2°F)
	Cu10	±1.1°C (±2.0°F)

#### MODEL 111 & 211

Ohms	0.00 to 410.00 ±0.2Ω accuracy
	0.0 to 2010.0 ±0.5Ω accuracy (211 only)
Excitation Current	0.09 to 5.80 mA source, 1mA read
Temperature Drift	<0.01%/°C change in ambient
Battery Life	Approx. 50 hrs from 9V alkaline battery (supplied)
Size	5.2" x 2.6" x 2.5" (130x67x64 mm)

### SPECIFICATIONS

Input/Output (322-1)	Type J, K, T, E and mV
Input/Output (422)	Type J, K, T, E, R, S, B, N, G, C, P, L, U, D and mV
Ranges	J: -210.0 to 1200.0°C (-346.0 to 2192.0°F)
	K: -230.0 to 1371.1°C (-382.0 to 2500.0°F)
	T: -260.0 to 400.0°C (-436.0 to 752.0°F)
	E: -240.0 to 1000.0°C (-400.0 to 1832.0°F)
	R, S: -18.3 to 1767.8°C (-1.0 to 3214.0°F)
	B: 315.6 to 1820.0°C (600.0 to 3308.0°F)
	N: -230.0 to 1300.0°C (-382.0 to 2372.0°F)
	G: 100.0 to 2320.0°C (212.0 to 4208.0°F)
	C, D: -1.1 to 2320.0°C (30.0 to 4208.0°F)
	P: -217.8 to 1395.0°C (-360.0 to 2543.0°F)
	mV: ±99.999mV
Accuracy	±(0.008% + 0.006mV), typically ±0.2°C or better
Cold Junction Effect	<0.05°/°C change in ambient
Battery Life	Approx. 40 hrs from 9V alkaline battery (supplied)
Size	5.2" x 2.6" x 2.5" (130x67x64 mm)

### ORDERING INFORMATION

(Batteries, carrying case and three year warranty included)

AL/111	RTD Calibrator (100Ω Pt, 385)
AL/211	RTD Calibrator (8 types)
AL/322-1	Thermocouple Calibrator (type J, K, T, E)
AL/422	Thermocouple Calibrator (14 types)