



Ectron
CORPORATION[®]

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PRODUCT COMPARISON

Ectron Models 1140A, 1120, and 1100 Thermocouple Simulator-Calibrators

All Specifications Include Cold-Junction Compensation*

	1140A	1120	1100
Available T/C types	12	10	4
Standard in Basic Unit	Yes	No	Yes
		Optional Plug-in	
T/C Types available	B, C, D, E, G, J, K, N, PL2, R, S, T	B, C, E, J, K, N, PL2, R, S, T	E, J, K, T
Modes			
Simulate T/C	Yes	Yes	Yes
Output Dc	Yes	Yes	Yes
Measure T/C	Yes, autoranging	No	Yes, manual
Measure Dc	Yes, autoranging	No	Yes, manual
Resolution			
Dc Source or Measure	Full 7 digits	Full 6 digits	Full 5 digits
T/C Source or Measure	Full 6 digits	Full 6 digits	Full 5 digits
Dc Resolution	0.01 μ V	0.1 μ V	0.1 μ V
T/C Resolution	0.01°C	0.1°C	0.1°C
Dc Accuracy			
24 Hours	$\pm 0.002\% \pm 1.0 \mu$ V	N/S	N/S
6 Months	$\pm 0.0025\% \pm 2.0 \mu$ V	$\pm 0.018\% \pm 8 \mu$ V	$\pm 0.02\% \pm 11 \mu$ V
1 Year	$\pm 0.003\% \pm 2.5 \mu$ V	N/S	N/S
T/C Accuracy			
Common Ranges (E,J,K,T)	0.06°C	0.15°C	0.2°C
Output Impedance	0.05 Ω	0.05 Ω	0.1 Ω
Remote Interfaces			
Standard in basic unit	GPIB (IEEE-488)	None	None
Optionally available	USB, Ethernet, RS-232	GPIB (IEEE-488)	None
Calibration & Realignment			
General	Simple self cal	Elaborate procedure	Elaborate procedure
Internal Controls	None	Many internal controls	Many internal controls
Guided by	Display	Manual	Manual
Time Required for Customer Calibration	45 minutes; Requires 10 V reference, null meter, ice point, & calibrated T/C	Normally 8 hours	Normally 8 hours

* Most competitors' specifications do not include cold-junction compensation.