

# PRODUCT COMPARISON

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

All Specifications Include Cold-Junction Compensation\*

	1140A	1120	1100
<b>Available T/C types</b>	12	10	4
Standard in Basic Unit	Yes	No (Optional Plug-in)	Yes
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
<b>Modes</b>			
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
<b>Resolution</b>			
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 $\mu$ V	0.1 $\mu$ V	0.1 $\mu$ V
T/C Resolution	0.01°C	0.1°C	0.1°C
<b>DC Accuracy</b>			
30 Days	$\pm 0.002\% \pm 1.0 \mu$ V	$\pm 0.005\% \pm 3 \mu$ V	$\pm 0.01\% \pm 4 \mu$ V
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
<b>T/C Accuracy</b>			
Common Ranges (E,J,K,T)	0.06°C	0.15°C	0.2°C
<b>Output Impedance</b>	0.05 $\Omega$	0.05 $\Omega$	0.1 $\Omega$
<b>Remote Interfaces</b>			
Optionally Available	GPIB, USB, Ethernet	GPIB (IEEE-488)	None
<b>Calibration &amp; Realignment</b>			
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 Alignment	45 minutes	Normally 8 hours	Normally 8 hours

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

