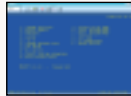


Unical Precision Temperature Calibrator

Calibrates 12 Thermocouples or 9 RTDs

Common Features for all UniCal Calibrators:

- Models for Thermocouples and mV or RTD and Resistance
- Input fuse protection prevents damage from inappropriate connections
- Rugged shock resistant ABS case with membrane keypad and internal metal coating for shielding
- Programmable scale factors, engineering units and quick-step calibration procedures plus averaging
- Gold terminals minimize thermoelectric error — simple connection via banana plugs or wires
- Quick and easy digital setting of output values — no time consuming knobs to turn
- Optional Bidirectional TTL to RS-232 interface, cable and DOS software diskette
- Dimensions: 8.25 x 3.8 x 1.6" (210 x 96 x 40mm) Weight: 2.2lbs (1kg)
- Complete with 4 AA Alkaline or NiCad batteries with recharger, NIST certificate issued at the time of manufacture and case (optional certificate issued at time of shipment)



Software Optional



UniCal T/C Thermocouple Calibrator

Features:

- Basic accuracy 0.04% of reading, 0.1°F/°C resolution
- Source or Measure 12 thermocouples plus mV
- Program and store up to 7 simulation programs using up to 60 values enables quick calibrations
- Fast internal or external cold junction compensation
- Single value, multistep, or continuous ramp/soak simulations; IPTS68/ITS90 scales

Specifications					
T/C	Range	Accuracy (% rdg)*	T/C	Range	Accuracy (% rdg)*
J:	-202 to 2192°F/-130 to 1200°C	±(0.04% + 0.54°F)	U:	-58 to 752°F/-50 to 400°C	±(0.04% + 0.54°F)
K:	-76 to 2372°F/-60 to 1300°C	±(0.04% + 0.54°F)	L:	-202 to 1400°F/-130 to 760°C	±(0.04% + 0.54°F)
T:	-58 to 752°F/-50 to 400°C	±(0.04% + 0.54°F)	N:	176 to 2372°F/80 to 1300°C	±(0.04% + 0.72°F)
R/S:	1472 to 3092°F/800 to 1700°C	±(0.04% + 1.26°F)	E:	-238 to 1832°F/-150 to 1000°C	±(0.04% + 0.54°F)
B:	2192 to 3308°F/1200 to 1820°C	±(0.04% + 1.26°F)	F:	176 to 2552°F/80 to 1400°C	±(0.04% + 0.54°F)
C:	32 to 4172°F/0 to 2300°C	±(0.04% + 1.8°F)			
mV:	0 to 21/21 to 100	±(0.05%+9µV) / ±(0.04%+12µV)		1µV resolution	
Reference junction compensation: internal: 23 to 122°F (-5 to 50°C); external: -58 to 212°F (-50 to +100°C)					
Scale factor Zero and span programmable: ±10000, square root display limits 0 and +2500					



UniCal RTD RTD Calibrator

Features:

- Basic accuracy 0.04% of reading
- Measure and simulate multiple RTD types
- Single value, multistep or continuous ramp/soak simulation
- Programmable scale factor and averaging
- Selectable temperature scale (IPTS68 & ITS90)



Specifications			
Sensor/Parameter	In-Out Ranges	Resolution	Accuracy (% of reading)*
Pt-100 (α=3850/3926/3910):	-328 to 1562°F/-200 to 850°C	0.1°F/°C	±(0.04% +0.18°F or 0.1°C)
Pt-100 (α=3902):	-328 to 1202°F/-200 to 650°C	0.1°F/°C	±(0.04% +0.18°F or 0.1°C)
Pt-100 (α=3923 / 3916):	-328 to 1112°F/-200 to 600°C	0.1°F/°C	±(0.04% +0.36°F or 0.2°C)
Ni-100 (α=617):	-76 to 356°F/-60 to 180°C	0.1°F/°C	±(0.04% +0.36°F or 0.2°C)
Ni-120 (α=672):	32 to 302°F/0 to 150°C	0.1°F/°C	±(0.04% +0.54°F or 0.3°C)
Cu-10 (α=42):	-94 to 302°F/-70 to 150°C	1°F/°C	±(0.04% +0.54°F or 0.3°C)
Cu-100 (α=42):	-292 to 302°F/-180 to 150°C	0.1°F/°C	±(0.04% +0.18°F or 0.1°C)
Pt-200 (α=3850):	-328 to 1562°F/-200 to 760°C	0.1°F/°C	±(0.04% +0.18°F or 0.1°C)
Pt-500 /1000 (α=3850/3910):	-328 to 1562°F/-200 to 850°C	0.1°F/°C	±(0.04% +0.18°F or 0.1°C)
Ω:	in: 0 to 400Ω; out: 2 to 400Ω	0.01Ω	±(0.04% + 27mΩ in) ±(0.04% + 35mΩ out)
Ω:	in: 20 to 4000Ω; out: 20 to 4000Ω	0.1Ω	±(0.04% + 270mΩ in) ±(0.04% + 350mΩ out)

Ordering Information:

- 423408**.....Precision T/C Calibrator, Alkaline batteries
423418.....Precision T/C Calibrator, Ni-Cad batteries/recharger 110V
423428.....Precision T/C Calibrator, Ni-Cad batteries/recharger 220V
423934.....RS-232 Interface, Cable and Software

For optional Certificate of Traceability to NIST use part number with suffix "-NIST".

Ordering Information:

- 423412**.....Precision RTD Calibrator, Alkaline batteries
423422.....Precision RTD Calibrator, Ni-Cad batteries/recharger 110V
423432.....Precision RTD Calibrator, Ni-Cad batteries/recharger 220V
423934.....RS-232 Interface, Cable and Software

For optional Certificate of Traceability to NIST use part number with suffix "-NIST".