



Scientech 2435T Universal Calibrator is a micro-controller based precision instrument designed for sourcing and measuring Ohm, RTDs, mA, mV, T/Cs and V signals. It is designed to calibrate a broad spectrum of instruments and retain its precision and repeatability over long periods in severe environmental conditions. An exceptionally stable voltage/current source provides continuously variable precision output signals with two ten-turn potentiometers.

Features

- Sources & measures Ohms, 9 RTDs, mA, mV, 8 thermocouples, V.
- High precision, accuracy, reliability & longevity.
- Graphical(128x64) LCD with backlight for excellent UI.
- Simultaneous display of temperature & mV or Ohms.
- Auto & manual cold junction compensation (CJC) for TC.
- Continuous indication of cold junction temperature.
- Compact in size and built for toughest environments.
- Unique self-check facility ensures reliable operations.
- Powered by AC/DC adapter or 6 AA Ni-Mh batteries.

Application

- Powers (24VDC) & calibrates 2-wire transmitter
- Simulates transmitter (with 24VDC loop power)
- Simulates & measures T/Cs with auto/manual CJC
- Simulates & measures multiple RTDs
- Works as voltage and current regulator or source
- Powers (24VDC) and calibrates control valve positioned
- Calibrates various temperature and process indicators

Technical Specifications

Function	Range	Resolution	Accuracy
Resistance	0.0 to 500.0 Ω	0.1 Ω	0.02% or rdg \pm 3 dgt
	0.0 to 2500.0 Ω	0.1 Ω	
DC mV	-10.00 to 100.00 mV	10 μ V	
DC mA ⁽¹⁾	0.000 to 20.000 mA	1 μ A	
DC Volts	0.000 to 20.000 V	1mV	
Low Resistance RTDs ⁽²⁾	Pt46 - 200.0 to 850.0 $^{\circ}$ C Pt100 - 200.0 to 850.0 $^{\circ}$ C Pt200 - 200.0 to 400.0 $^{\circ}$ C Cu53 - 50.0 to 180.0 $^{\circ}$ C Ni100 - 60.0 to 180.0 $^{\circ}$ C Ni120 - 60.0 to 180.0 $^{\circ}$ C	1 $^{\circ}$ C	0.05% or rdg \pm 3 dgt
High Resistance RTDs ⁽²⁾	Pt200 -200.0 ID 850.0 $^{\circ}$ C P1500 -200.0 to 850.0 $^{\circ}$ C Pu000 -200.0 to 400.0 $^{\circ}$ C Nil000 -60.0 to 180.0 $^{\circ}$ C	1 $^{\circ}$ C	0.05% or rdg \pm 3 dgt
T/Cs ⁽³⁾	J -210.0 to 1200.0 $^{\circ}$ C K -200.0 to 1372.0 $^{\circ}$ C N -200.0 to 1300.0 $^{\circ}$ C T -200.0 to 400.0 $^{\circ}$ C E -200.0 to 1000.0 $^{\circ}$ C R - 50 to 1768 $^{\circ}$ C S - 50 to 1768 $^{\circ}$ C B - 250 to 1820 $^{\circ}$ C	0.1 $^{\circ}$ C	0.05% or rdg \pm 5 dgt
		1 $^{\circ}$ C	0.05% or rdg \pm 3 dgt
Display	Graphical (128 x 64) LCD with backlight		
Input Impedance	Voltage	>1M Ω	
	Current	1 or 10 Ω depending on range	
	Resistance	Bridge -current of 0.1 to 0.5 mA depending on range	
Output Impedance	Voltage	< 0.05 Ω	
	Current	>1M Ω	
Source Capability	Voltage	Up to 15V in 600 Ω or 20V in 2000 Ω	
	Current	20mA in 800 Ω	
	Resistance	Up to the maximum specified range	
Battery	Type	6 AA sized Ni-Mh batteries with longer life for field use	
	Life	10-12hrs. @ 12mA output current	
	Status	Displays battery level using status bars and "LoBAT"	
Mains Operation	Power jack for AC/DC adapter/charger (230VAC, 50Hz to 9VDC, 200mA)		

Note : We do not provide any temperature sensor and transmitter with temperature calibrator.