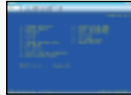


# UniCal Precision Current/Voltage Calibrators

## Calibrates Voltage or Current in mA

### Common Features for all UniCal Calibrators:

- Models for Current and Voltage
- 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 mA Current Calibrator

### Features:

- Basic accuracy 0.05% of reading
- Measurement and simulation on passive or active external current loops
- Scalable input/output in engineering units of choice
- Internal 24VDC Loop power supply



Specifications	Model 423405
Ranges/ Resolution:	0.00 to 22.00mA, 4.00 to 20.00mA / 0.01 mA or 0.1%
Accuracy*:	$\pm(0.05\%rdg + 10\mu A)$ @ 23°C $\pm 2^\circ C$
Power supply for external loop:	24VDC, max. current 22mA
Output impedance:	Max. 1000 $\Omega$ (20mA with internal feeder 24VDC)
Internal shunt resistance:	< 50 $\Omega$
In/ Out data memory:	3 values user programmable
Scale factor:	Zero and span programmable $\pm 10000$
Square Root (programmable):	In combination with scale factor (display limits 0 and + 2500) for flow transmitter

### Ordering Information:

**423405** .....Precision Current Calibrator, Alkaline batteries  
**423415** .....Precision Current Calibrator, Ni-cad batteries/recharger 110V  
**423425** .....Precision Current 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".

## UniCal V Voltage Calibrator

### Features:

- Basic 0.1% of reading accuracy
- Measure or simulate in scalable engineering units of choice
- Menu driven setup makes all functions easy to operate
- Memory for 3 output values with manual recall and programmable step function
- Programmable square root, X scaling and averaging



Specifications	Model 423404
Ranges:	0.0 to 100.0mV, 0.000 to 1.000V, 1.000 to 5.000V, 0.000 to 10.000V (V or %)
Accuracy/ Resolution:	$\pm(0.1\%rdg + 0.6mV \text{ or } 1V)$ at $+23^\circ C \pm 2^\circ C$ / 0.01mV, 1mV or 0.1%
Impedance:	Input: > 1M $\Omega$ ; Output: >1 $\Omega$ with 20mA max.
In / Out data memory:	3 values user programmable
Scale factor:	Zero and span programmable $\pm 10000$
Square Root:	In combination with scale factor (display limits 0 and + 2500) for flow transmitter

### Ordering Information:

**423404** .....Precision Voltage Calibrator, Alkaline batteries  
**423414** .....Precision Voltage Calibrator, Ni-Cad batteries/recharger 110V  
**423424** .....Precision Voltage 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".