



### Easy to use

The Transmation Model 1048 will check, calibrate and measure all your current signal instruments in a 4 to 20 or 10 to 50 milliamp loop plus source and measure DC Volts.

Use at every point in your loop. Source & read 0.00 to 52.00 mA, simulate a 2-wire transmitter or use the 1048 to supply loop power while measuring your 2-wire transmitters. Toggle the display to show milliamps or percent span.

### Source milliamps

Stroke valves, calibrate recorders and digital indicators or any other instruments that get their input from a 4 to 20 or 10 to 50 mA loop. Easily set any value to within 0.01 mA with the numeric keypad.

### Source millivolts and volts

Calibrate recorders, analyzers and other instruments with 0 to 100 mV, 0 to 1, 1 to 5 or 0 to 10 Volt inputs. Easily set any value to within 0.01 mV or 0.001V with the numeric keypad.

### Recall output settings

Easily store up to nine setpoints per range. Instantly change the output by recalling any stored setpoint.

### Fast output stepping

Automatically step through some or all of the nine stored setpoints with dwell time from 5 to 500 seconds. Plus manual stepping for full control during instrument calibration.

### Calibrate using loop power

Check loop wiring and receivers by using the Model 1048 in place of a 2-wire transmitter. Simulate a changing process input to check loop response and control settings.

### Read loop current

Check controller outputs or measure the milliamp signal anywhere in the loop. The Model 1048 measures 0.00 to 52.00 mA signals with much greater accuracy than a typical multimeter. Toggle the display to show milliamps or percent of span.

### Power and measure 2-wire transmitters

Simultaneously measure the output of a 2-wire transmitter while using the internal loop supply to power the transmitter. Handy for checking transmitters in the field or on the bench.

### Read millivolts and volts

Check loop power supplies, batteries or any DC voltage in the plant from 0.00 to 90.00 mV, 0.000 to 20.000 V and 0.00 to 48.00 V.

## DC Process Signal Calibrator Model 1048



- Calibrates all milliamp instruments  
Source 4 to 20 and 10 to 50 milliamps  
Simulate two-wire transmitters  
Read milliamp outputs  
Power & measure two-wire transmitters
- Calibrates voltage instruments  
Source 0.00 to 100.00 mV and 0.000 to 10.000 VDC  
Measure 0.00 to 90.00 mV, 0.000 to 20.000 and 0.0 to 48.0 VDC
- Rugged and reliable  
Rubber boot for protection in the plant
- Easy to use  
One touch to set the output & function
- Accuracy to  $\pm 0.015\%$   
Within  $\pm 0.02$  mA from 4 to 20 mA  
Within  $\pm 0.004$  V from 0 to 10V
- Long lasting alkaline batteries  
Four "AA" Alkaline cells for easy replacement
- Nine setpoints for each range  
Automatically or manually step the output
- Milliamp or percent display  
Source or Read from 0.00 to 52.00 mA or in percent of 4 to 20 and 10 to 50 mA span

# Product Specifications

	<b>Range</b>	<b>Accuracy</b>
Range and Accuracy		
Source Milliamp	0.00 to 52.00	$\pm(0.015\% + 2 \text{ Isd})$
Read Milliamp	0.00 to 52.00	$\pm(0.015\% + 2 \text{ Isd})$
Source Volts	0.000 to 20.000	$\pm(0.015\% + 2 \text{ Isd})$
Read Volts (low)	0.000 to 20.000	$\pm(0.015\% + 2 \text{ Isd})$
Read Volts (high)	0.00 to 48.00	$\pm(0.05\% + 2 \text{ Isd})$
Source Millivolts	0.00 to 100.00	$\pm(0.015\% + 2 \text{ Isd})$
Read Millivolts	0.00 to 90.00	$\pm(0.015\% + 2 \text{ Isd})$
mA compliance	Up to 1000 $\Omega$ load (4 to 20 mA) Up to 400 $\Omega$ load (10 to 50 mA)	
Voltage drive capability	1 mA	
Batteries	Four "AA", (R6) batteries (Alkaline supplied and recommended)	
Battery life	25 hours typical	
Operating temperature range	14 to +122 °F (-10 to +50°C)	
Storage temperature range	-40 to +140°F (-40 to +60°C)	
Overall size	190.5 x 101.6 x 38.1 mm (7.5 x 4.0 x 1.5 inches)	

## Warranty

Transmation products are warranted to be free from defects in material and workmanship (excluding fuses, batteries and leads) for a period of one year from the date of shipment. Warranty repairs can be obtained by returning the equipment prepaid to our factory. Products will be replaced, repaired, or adjusted at our option.

*Transmation gives no other warranties, including any implied warranty of fitness for a particular purpose.* Also, Transmation shall not be liable for any special, indirect, incidental or consequential damages or losses arising from the sale or use of its products.

Ordering information	Part No.
Model 1048 DC Process Signal Calibrator	1048E

Included with each Model 1048 are:  
 1 Pair of test leads with banana plugs and alligator clips  
 Rubber Boot

**Transmation, Inc.**

**Optimum Energy Products Ltd**  
 1-877-766-5412

