

# Compact Multifunction Calibrator

CA71



Optional†

- ✓ Simultaneously Source and Measure
- ✓ Voltage, Pulse, Current, Resistance, Thermocouple, RTD, Frequency Signals
- ✓ Autostep, Sweep, and Memory Functions

The CA71 Calibrator is a small, lightweight, multifunction calibrator that can simultaneously source and measure voltage, current, resistance, TC, RTD, frequency, and pulse signals.

The Calibrator incorporates rotary switches for simple handling. Just open the carrying case cover and connect the cables, and you're ready to take measurements.

A wide array of useful functions are offered, including source (output can be set in steps): power; transmitter; divided (n/M, eliminating need for calculations for percentage output); autostep (changes can be sourced every 10% or 25%); online communication (RS232); sweep (linearly changes output over 16 or 32 seconds); memory (50 sets); and temperature monitor function.

## Specifications

Parameter

**Signal Generating Unit**

**Response Time:** Approx 1 second

**Signal Generating Unit**

**Voltage Limiter:** Approx 32V

**Signal Generating Unit**

**Current Limiter:** Approx 25 mA

**Divided Output (n/m) Function:**

Output = setting x (n/m)

where n = 0 to m; m = 1 to 19; n x m

**Auto-Step Output Function:**

n value sent automatically when

n/m function selection is selected

(approx 2.5 or 5 seconds/step)

**Sweep Function:** Sweep time

(approx 16 or 32 seconds)

**Memory Function:** 50 value sets

(generated and measured values)

**Measuring Unit Maximum Input:**

**Voltage Terminal:** 300 Vac

**Current Terminal:** 120 mA DC



**Current Input:** Fuses: 125 mA/250V

**Measuring Unit Ground Voltage:**

Maximum 300 Vac

**Measurement Display Updating Rate:**

Approx 1 second

**Serial Interface:**

Enabled via CA71-RS cable

**Display:** Segmented LCD

(approx 76 x 48 mm)

**Backlight:** LED backlight; auto-off

**Power Supply:** 4 "AA" alkaline

batteries (included)

**Battery Life:** Approx 20-hr for

measurement and voltage output

(12-hr for current)

**Consumed Power:** Approx 7 VA

(using 120 Vac adaptor)

**Auto Power-Off Function:** Approx

10 minutes (can be disabled)

**Applicable Standards:**

IEC61010-1, IEC61010-2-31;

EN61326-1: 1997 + A1: 1998; EN55011:

1998, Class B, Group 1

**Insulation Resistance:**

500 Vdc, 50 MΩ or greater

**Withstand Voltage:**

3.7 kVac, for 1 minute

**Operating Temperature and Humidity**

**Ranges:** 0 to 50°C, 20 to 80% RH

(no condensation)

**Storage Temperature and Humidity**

**Ranges:** -20 to 50°C, 90% RH or less

(no condensation)

**External Dimensions:**

Approx 190 W x 120 H x 55 mm D

(7.5 x 4.7 x 2.2")

**Weight:** Approx 730 g (1.6 lb)

(including batteries)

† Refer to the Order Chart for NIST

calibration ordering information.

**To Order Visit [omega.com/ca71](http://omega.com/ca71) for Pricing and Details**

Model No.	Description
CA71	Calibrator
CA71-NIST†	Calibrator with NIST calibration certificate

Comes complete with signal generating lead cables (1 red, 2 black), measurement lead cables (1 red, 1 black), carrying case, power adaptor, operator's manual, fuse: A1501EF (for current terminal input protection), and 4 "AA" alkaline batteries.

**Ordering Example:** CA71, calibrator, supply adaptor.

**OCW-2, OMEGACARE<sup>SM</sup>** extends standard 3-year warranty to a total of 5 years.

## Accessories

Model No.	Description
CA71-PS	120 Vac adaptor
CA71-PS230	230 Vac adaptor
CA71-FUSE	Fuse, input, package of 1
CA71-RS	RS232 cable
CA71-RJC	External RJC*

\* Allows remote cold junction compensation for thermocouples instead of using the standard internal sensor.