

Process Multimeter

CA450

Loop Power and 4 to 20 mA Output function in a DMM

From daily inspection to troubleshooting of measurement instruments—
all in a single unit!

Features

■ Loop check functions

- Simultaneous 24 V loop power and mA measurement
- HART/BRAIN mode setting with loop power (Adds 250 ohm resistance internally)

■ Generation functions

- SIMULATE (SINK) function simulates transmitters
- 4-20 mA span/step/auto-step/sweep output

■ Measurement functions

- High accuracy signal measurement: DC mA 0.05%/30,000 mA
- Handheld DMM function
- Peak Hold function for the peak voltage measurement of DCS power supply
- Dedicated sensor modes for direct reading of many sensor signal types

■ Enhanced Safety—helps eliminate electric shocks

- Current terminal shutter prevents incorrect connections
- 1 A or more of AC/DC current can be read directly using the optional clamp probe and scaling in SENSOR mode.*1
- Measurement categories 600 V CAT. IV, 1000 V CAT. III

■ Linking with a PC

- DMM Communication Package can be used to save and manage the measurement data.

*1: AC/DC 600 mV range only



* This is a composite picture. The shutter actually opens during current measurement and generation.

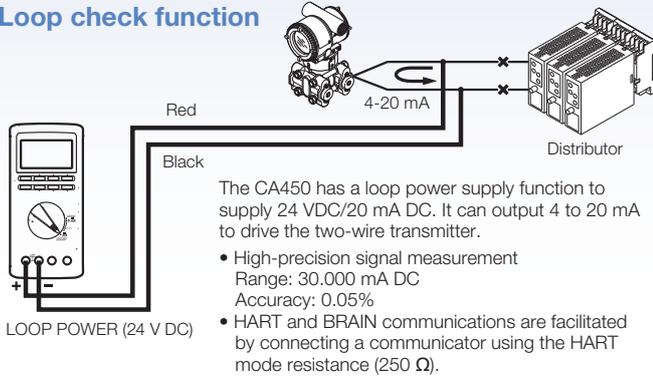
CA450

Process Multimeter

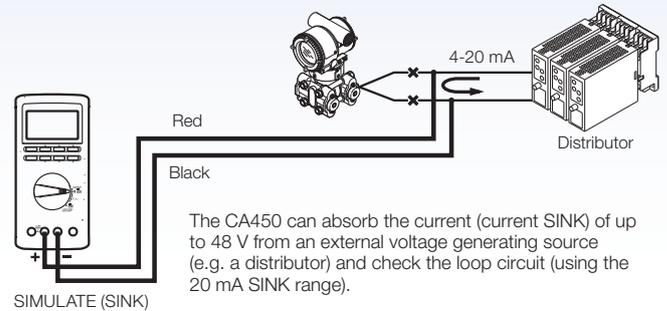
The CA450 can be used in a wide range of applications, such as checking the operation of field devices and maintenance of electrical equipment.

Transmitter application

Loop check function



Transmitter simulation function



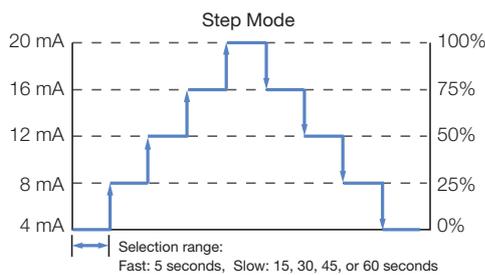
Valve/Positioner application

Span generation function

The span from 0 to 20mA or 4 to 20 mA (0 to 100%) can be switched with one touch. It is easy to adjust the span of the valve and check the operation of the valve.

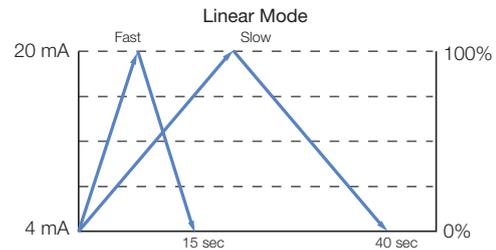
Step generation function

The step can be generated by increasing or decreasing the step between 0 and 20 mA or between 4 and 20 mA in increments of 25% up to 100% with one touch, or stepwise automatically (step width is selectable) to improve work efficiency. The Slow mode of Step Mode can also be used to change the step time in accordance with the performance of field devices.



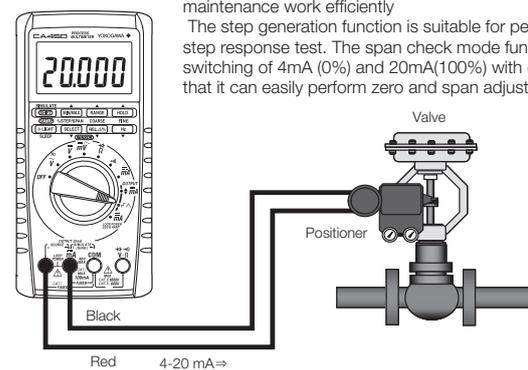
Sweep generation function

This function is used to increase or decrease the output value to the setpoint at the specified ramp rate. It is possible to switch between Fast (15 sec) and Slow (40 sec) increase or decrease.



When checking the open-close position of valve and positioner and adjusting it the CA450 supports your maintenance work efficiently

The step generation function is suitable for performing a step response test. The span check mode function enables switching of 4mA (0%) and 20mA(100%) with one key so that it can easily perform zero and span adjustment.

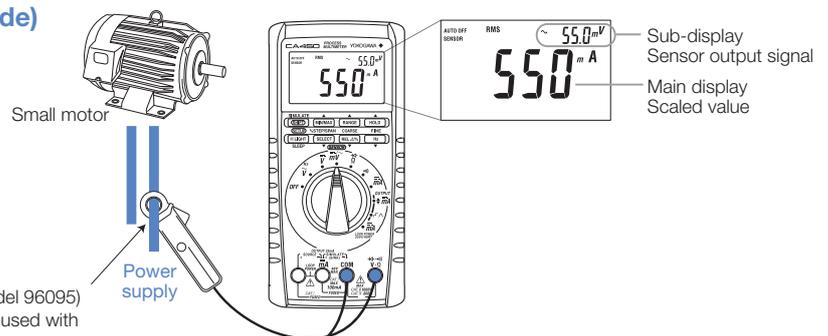


Electrical equipment check

AC/DC Current measurement (SENSOR mode)

The CA450 can directly read the various sensor output signals (mV DC/AC) at any scaling. The units can be changed (16 units are available).

Output signal and scaled value are simultaneously displayed.



AC/DC clamp-on probe (Model 96095)
Reads maximum 60 A when used with the CA450.

Product Model code

Name	Model	Suffix code	Descriptions
Process Multimeter	CA450	-E	With English Instruction manual

Standard accessories

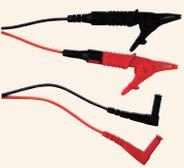
Name	Model	Descriptions
Test leads	98073	1000 V CAT III, 600 V CAT IV Red Black 1 set
Lead cables	98064	Alligator clip, for control signal only (under 70 V)
Fuse	99042	440 mA/1000 V 10 A cut off 1 piece

Optional accessories

Name	Model	Suffix code	Descriptions
Carrying Case	93029		For carrying the CA450, the test leads, and the lead cables
Carrying Case	93043	-P1	Carrying case with hanger strap and large size case
Magnet hook	99032		Magnet hook (Maximum weight 1.5 kg)
DMM Communication Package ^{*1}	92015		USB adapter, USB cable and software
Alligator Test leads	99014		1000 V CAT III, 600 V CAT IV Red Black 1 set
1 to 5 V Adapter Set	99031		250 Ω resistor, terminal adapter and leads
AC/DC Clamp-on Probe	96095		DC180 A, AC130 A, output 10 mV/A
Current Clamp-on Probe	96001		AC400 A, output 10 mV/A

*1 : The application software can use only the measurement function. (Logging function only)

Accessories

 Test leads Model:98073	 Lead Cables Model:98064	 Fuse Model:99042	 DMM Communication Package 92015
 Alligator Test leads Model:99014	 AC/DC Clamp-on Probe Model:96095	 Current Clamp-on Probe Model:96001	 Carrying Case Model:93029
 Magnet hook Model:99032	 The Magnet hook can be attached to magnetic body (e.g. iron).	 Carrying Case Model:93043-P1	 The inner case with detachable straps can be hung on piping or handrails.

Related Products

 CA700	 CA150	 CA71/CA51	 CA310	 CA320	 CA330	 CL420
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NOTICE

- Before using the product, read the instruction manual carefully to ensure proper and safe operation.



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