M·SYSTEM CO.,LTD.

CURRENT LOOP CHECKER
(portable current signal generator)

MODEL **C-HCL-A**

MODEL & SUFFIX CODE SELECTION

C–HCL–A

MODEL

ORDERING INFORMATION

Specify code number. (e.g. C-HCL-A)

PACKAGE INCLUDES...

- Test leads (1.2 meters)
- AA cells (2 pieces)

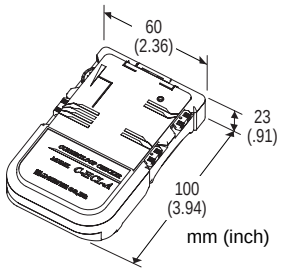
GENERAL SPECIFICATIONS

Housing material: ABS resin
Connection: 2 mm (0.08") diameter test plugs
Output monitoring: Directly measure output current
Monitor jack: 2 mm (0.08") diameter
Output range: 0 – 24mA DC
Mode switch: Switchable between 2-wire loop mode and 4-wire mode*
Power LED: Red LED light turns on when the power is supplied.
Continuous operating hours: Approx. seven hours with load resistance 750Ω, output 12mA, and when three new alkaline AA cells are used.
Usage: Stand ot strap holder

*The 2-wire loop mode controls current signals supplied from the power source such as a current loop supply, to perform a loop test (sink capability), whereas in the 4-wire mode, constant current is supplied to the transmitter (source capability).

OUTPUT

■2-WIRE LOOP MODE
Maximum input voltage: 24V DC nominal (28V DC max)
■4-WIRE MODE
Load resistance: 750Ω
Maximum voltage across output terminals: 21.5V DC ±0.5V
■COMMON SPECS
VR output range: Adjustable with the Current Adjuster in the range of 0 to 24mA DC
Fixed output: Selectable with the Current Switch from 4, 12, and 20mA
Monitor output: Available when the Monitor Switch is held at the M side.



Functions & Features

- Used to perform a loop test during a maintenance, inspection or testing of an instrumentation system or plant
- Generates simulated signals at the receiver side in place of an on-site transmittter
- Compact and light weight to fit into a pocket
- Provides 4, 12, and 20mA switchable as required
- Selectable between 2-wire and 4-wire systems

INSTALLATION

Power supply: Two AA cells
Operating temperature: -5 to +40°C (23 to 104°F)
Operating humidity: 30 to 80% RH (non-condensing)
Dimensions: W60×H100×D23 mm (2.36"×3.94"×0.91")
Weight: Approx. 70 g (2.47 oz) excluding batteries

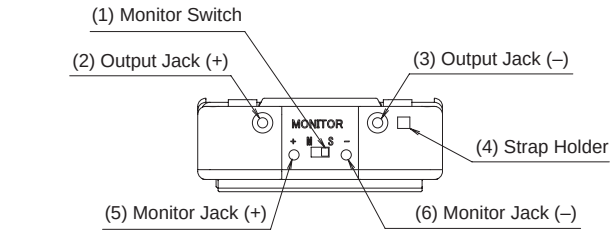
PERFORMANCE

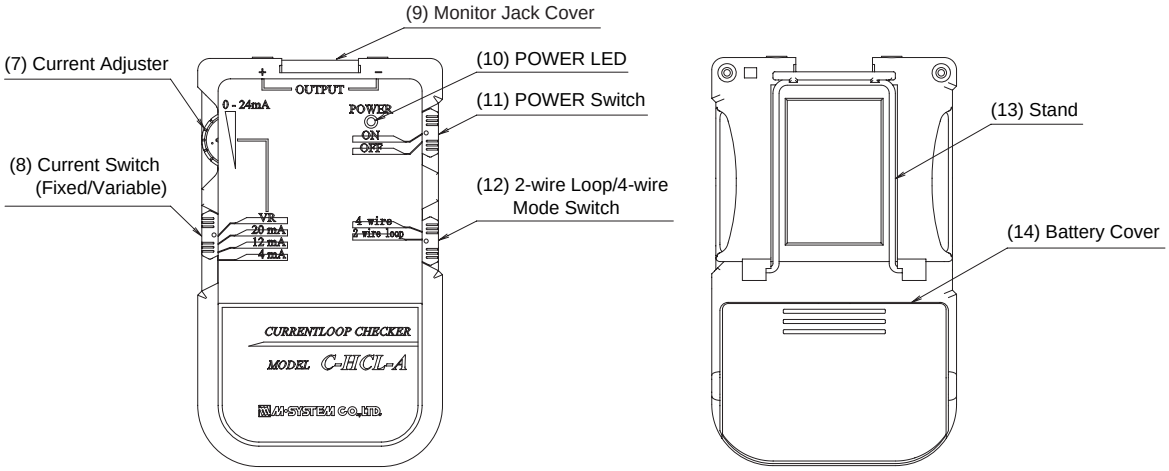
Accuracy: ±2.5%
(% of the fixed settings at 4, 12, or 20mA)

NOTICE

The C-HCL-A realizes stable constant current outputs; however, it is not suitable for adjustment and calibration of measuring instruments or precision instruments. Select appropriate instruments for adjustment and calibration according to rquirements.

FRONT, TOP & REAR VIEWS

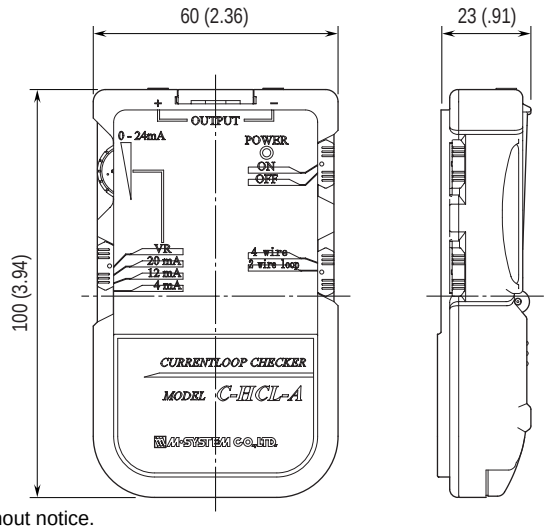




■FUNCTIONAL DESCRIPTIONS

NAME	FUNCTION
(1) Monitor Switch	To enable the monitoring function, slide from S to M.
(2), (3) Output Jacks (+), (–)	Connect the test leads to + (red) and – (black).
(4) Strap Holder	Put a strap through this holder to suspend the checker.
(5), (6) Monitor Jacks (+), (–)	To monitor a current value, insert the test lead pins of a measurement device into these jacks: red pin to (+) and black pin to (–).
(7) Current adjuster	Adjustable continuously in the range of 0 to 24mA while the Current Switch (8) is held at the VR position.
(8) Current Switch (Fixed/Variable)	Fixed value is selectable from 4, 12, and 20mA.
(9) Monitor Jack Cover	To use the monitoring function, remove the cover.
(10) POWER LED	Red LED turns on when the power is on.
(11) POWER Switch	Switch ON and OFF for the checker.
(12) 2-wire Loop/4-wire Mode Switch	Current output is selectable from two modes, 2-wire loop (sink) and 4-wire (source).
(13) Stand	Pull the bar to set the checker in the upright position.
(14) Battery Cover	To replace a battery, remove the cover.

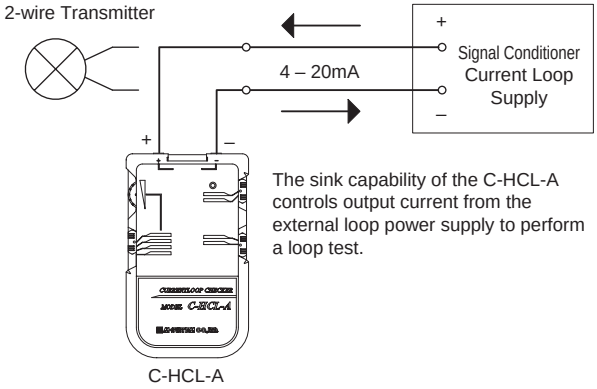
EXTERNAL DIMENSIONS mm (inch)



Specifications subject to change without notice.

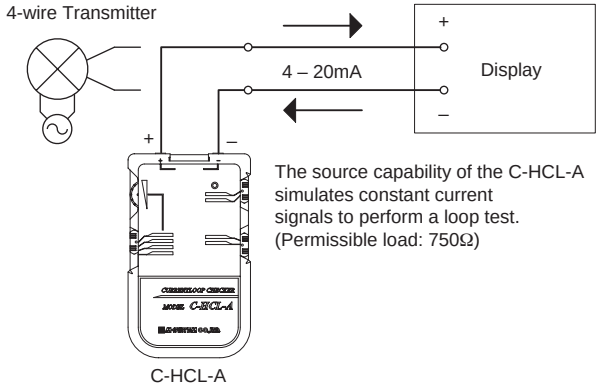
CONNECTION EXAMPLES

■2-WIRE SYSTEM



The sink capability of the C-HCL-A controls output current from the external loop power supply to perform a loop test.

■4-WIRE SYSTEM



The source capability of the C-HCL-A simulates constant current signals to perform a loop test. (Permissible load: 750Ω)

■USING THE MONITORING FUNCTION