

sc100 Controller

Controller—Multi-Parameter

Features and Benefits

One Controller for One or Two Sensors

The Hach sc100 Controller receives data from up to two sensors. Use any of Hach's line of digital sensors for pH/ORP, conductivity, dissolved oxygen, or turbidity.

One Controller for One or Two Parameters

Not only can the sc100 controller be used for up to two sensors, but the sensors need not be the same. Mix and match any combination of parameters.

One Controller for Many Options

Communications using RS485/MODBUS® or RS232/MODBUS® protocols or the wireless infrared port are available. (Contact your Hach representative for other communication protocols.) Multiple control functions include built-in PID, control contacts, and alarm functions.



The Model sc100 Controller receives data from one or two sensors. Its plug-and-play, mix-and-match operation lets it fit into any facility or workflow. Digital communication with any Hach digital sensor or probe is simple and reliable.

DW

WW

PW

IW



“Plug and Play” Operation

There's no complicated wiring or set up procedures with the sc100 controller. Just plug the sensor in and it's ready for use without special ordering or software configuration.

Simple, Reliable Data Collection

A built-in data logger collects measurement at user selectable intervals (1 to 15 minutes), together with calibration and verification points, alarm history, and instrument setup changes for up to 6 months. With a two-year warranty, the Hach sc100 Controller is built to last.

DW = drinking water WW = wastewater municipal PW = pure water / power
 IW = industrial water E = environmental C = collections FB = food and beverage



Be Right™

Specifications*

Ambient Conditions

Operation

With less than 7 W sensor load:
-20 to 60° C (-4 to 140° F); 0 to 95% relative humidity,
non-condensing

With less than 25 W sensor load:
-20 to 40° C (-4 to 104° F); 0 to 95% relative humidity,
non-condensing

Storage

-20 to 70° C (-4 to 158° F); 0 to 95% relative humidity,
non-condensing

Power Requirements

100 to 230 Vac, 50/60 Hz; Power: 11W with 7W sensor load;
35W with 25W sensor load

Display

Graphic LCD, 128 x 64 pixels with LED backlighting

Relays

Three SPDT, user-configurable contacts rated 100 to 230 Vac,
5 Amp resistive maximum

Outputs

Two analog 4-20 mA, maximum impedance 500 Ohms,
optional digital network connection

Control

PID, High/low phasing, setpoint, deadband, overfeed timer,
off delay, and on delay

Alarms

Low alarm point, low alarm point deadband, high alarm point,
high alarm point deadband, off delay, and on delay

Communication (Optional)

RS-232 (MODBUS®): Configure and retrieve measured data for
one analyzer using IBM-compatible PC

RS-485 (MODBUS®): Advanced communications/networking
with PLC or SCADA system directly from analyzer.

Memory Backup

All user settings are retained indefinitely in memory
(non-volatile) (EEPROM)

Mounting Configurations

Surface, panel, and pipe (horizontal and vertical)

Enclosure

NEMA 4X/IP66; metal enclosure with corrosion-resistant finish

Dimensions

1/2 DIN; 144 x 144 x 150 mm (5.7 x 5.7 x 5.9 in.)

Weight

1.6 kg (3.5 lbs.)

Certifications

ETL to UL 61010A-1 and CSA C22.2 No. 1010.1

*Specifications subject to change without notice.

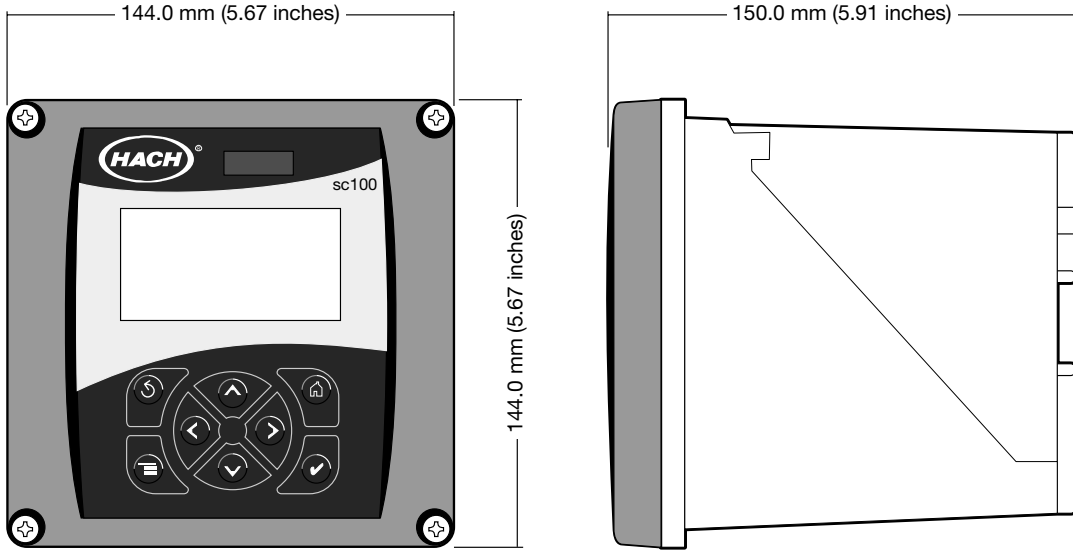
Engineering Specifications

- The controller shall be a microprocessor-based instrument.
- Connections between the sensors and the controller shall be "plug and play."
- The controller shall have the option for RS232/MODBUS® or RS485/MODBUS® serial input/output capability for two-way communication to a computer and have wireless downloading capability through an IR Port located on the interface unit to download and print realtime data, calibration history, and current set points in a CSV format.
- The Interface unit shall allow operators to control sensor and interface functions with menu-driven software.
- The interface unit shall have a built-in data logger with the capacity to store data on 15-minute intervals for up to 6 months with two sensors per controller.
- The interface unit shall include two analog 4-20 mA outputs and 3 unpowered SPDT form 'C' alarm contacts.
- The interface unit shall include two independent PID control functions.
- The interface unit shall be housed in a NEMA-4X/IP66 metal enclosure with corrosion-resistant finish.
- The controller shall be mounted horizontal or vertical on surface, panel, or pipe.
- The AC power supply shall be housed in the interface unit and automatically accept input in the range of 100 to 230 Vac, 50/60 Hz.
- All system components shall be certified by ETL to UL 61010A-1, CSA C22.2 No. 1010.1.
- The controller shall be warranted for two full years against defects in material and workmanship.
- The controller shall be Hach Company Model sc100 Controller.

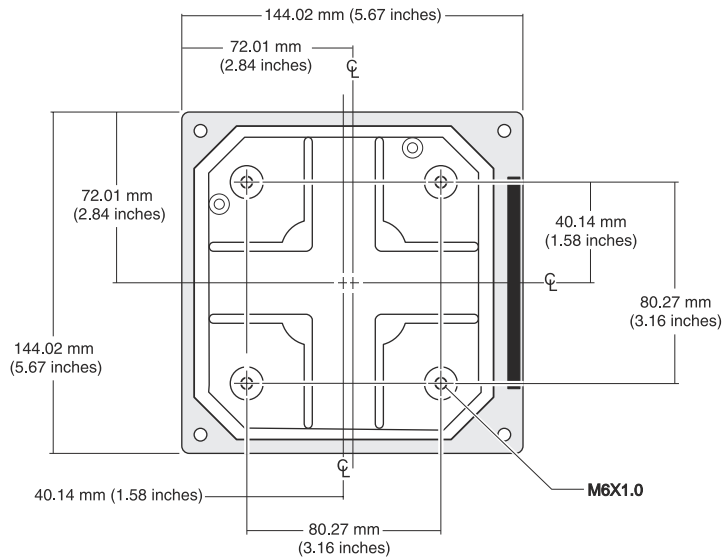
Dimensions

The sc100 controller unit can be installed on a surface, panel, or pipe (horizontally or vertically). No tools are needed to connect the controller unit to any Hach digital sensor.

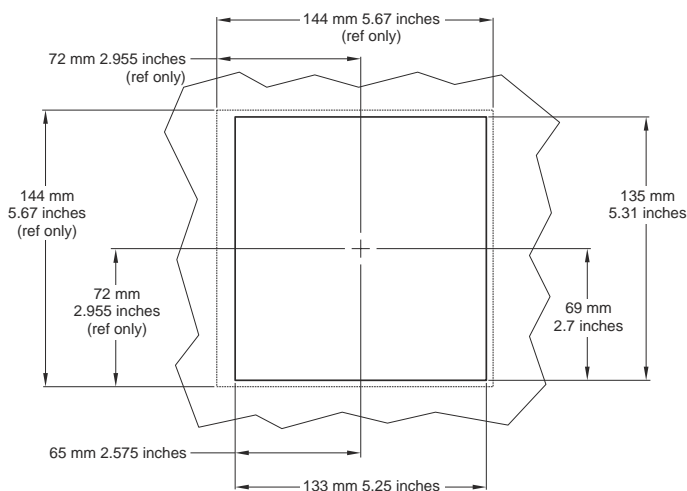
Front and Side Views



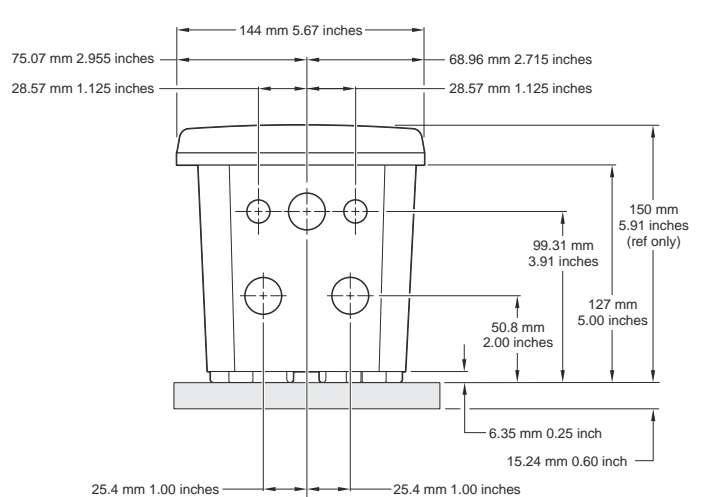
Back View



Panel Mount Cut-Out Dimensions



Conduit Hole Dimensions



Ordering Information

- LXV401.52.00002** sc100 Controller Standard
LXV401.52.01002 sc100 Controller with RS-232 (MODBUS®)
LXV401.52.02002 sc100 Controller with RS-485 (MODBUS®)

Note: Power cords must be ordered separately.

Note: Other communication options are available. Please contact Hach Technical Support or your Hach representative.

Power Cords

- 5448800** Power Cord with strain relief, 125 Vac
5448900 Power Cord with strain relief, 230 Vac, European-style plug

Accessories

- LZX961.5** Sun Shield, for controller

To complete your digital measurement system, choose from Hach's family of digital products...



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In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

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Keep it pure.

Make it simple.

Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

In the United States, contact:

HACH COMPANY World Headquarters
 P.O. Box 389
 Loveland, Colorado 80539-0389
 U.S.A.
 Telephone: 800-227-4224
 Fax: 970-669-2932
 E-mail: orders@hach.com
www.hach.com

U.S. exporters and customers in Canada, Latin America, sub-Saharan Africa, Asia, and Australia/New Zealand, contact:

HACH COMPANY World Headquarters
 P.O. Box 389
 Loveland, Colorado 80539-0389
 U.S.A.
 Telephone: 970-669-3050
 Fax: 970-461-3939
 E-mail: intl@hach.com
www.hach.com

In Europe, the Middle East, and Mediterranean Africa, contact:

HACH LANGE GmbH
 Willstätterstraße 11
 D-40549 Düsseldorf
 GERMANY
 Tel: +49 (0) 211 5288-0
 Fax: +49 (0) 211 5288-143
 E-mail: info@hach-lange.de
www.hach-lange.com



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