sc1000 MULTI-PARAMETER UNIVERSAL CONTROLLER



Applications

- Drinking Water
- Wastewater
- Power
- Industrial Water



A fully modular system consisting of a display module and one or more probe modules.

More Confidence in Your Instrument's Performance

Available exclusively on the sc1000, PROGNOSYS predictive diagnostics uses patented multivariable diagnostic software to read multiple inputs from your instrument and alert you to the instrument's overall performance. An easy-to-read dashboard provides instant indication of measurement reliability and service requirements.

Plug and Play Operation

There's no complicated wiring or set up procedures with the sc1000 controller. Plug any Hach digital sensor into a Probe Module and it's ready for use. No special ordering or software configuration is needed.

Communication Options to Fit Any Application Need

The sc1000 controller features state-of-the art Modbus TCP/IP communications protocol for seamless integration into a network of devices that support TCP/IP sockets. Use a standard Ethernet cable or connect wirelessly using GSM/GPRS to communicate with your SCADA, PLC or other network. The sc1000 also offers up to 12 analog outputs for measured values and up to 12 analog or digital values from non-digital sensors.

Expandable and Upgradable

The sc1000 Controller can adapt to your needs. Add or change probes without having to change the controller. Plus, with a single Display Module, additional Probe Modules and associated sensors can be added or removed depending on operational needs. Fully upgradable software ensures that this system will not be obsolete. Hach service plans are available.

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Specifications*

Operating
Temperature Range

-20 to 55 °C (-4 to 131 °F), 0 to 95% relative humidity,

non-condensing

Storage Conditions

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

non-condensing

Power Requirements

(Voltage)

100 - 240 V AC, 24 V DC

Power Requirements

(Hz)

50/60 Hz

Display

1/4 inch VGA graphical backlit TFT color Glas/Glas-Touch screen, high resistance, 320 x 240 pixels

Display Viewing Area Alarm 11.4 x 8.6 cm (4.5 x 3.4 in)

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

and on delay

Relays Up to four SPDT, user-configurable

contacts rated 100 to 230 VAC, 5 Amp resistive maximum per probe module. Additional relays are available with additional probe

modules.

Inputs Up to 12 analog 0-20 mA,

maximum impedance 500 Ohms per probe module. Additional analog inputs are available with additional probe modules.

Outputs Up to 12 analog 0/4-20 mA,

maximum impedance 500 Ohms per probe module. Additional analog outputs with additional probe modules. Optional digital communcations via Modbus® (RS485) and Profibus® DP/V1.

Analogue Output Functional Mode

PID, high/low phasing, setpoint, deadband, overfeed timer, off

delay, on delay

Communication Modbus® (RS485): Advanced

communications/networking with PLC or SCADA system directly

from analyzer

Profibus® DP/V1 (certified)

GSM/GPRS Quad-band cellular module (FCC and IC approved,

EU and US only)

Ethernet service port, RJ45,

10 MB/s

Mounting Configurations

Surface, panel, and pipe (horizontal and vertical) with

optional sun shield

Enclosure Rating IP65

Material Enclosures ABS (display module) and metal

(probe module) enclosure with corrosion resistant finish

150 mm x 315 mm x 250 mm

Dimensions Metric (H x W X D)

Certifications North American Certifications:

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

FCC ID QIPMC56 / IC ID 267W-MC56

European Certifications:

CE per 73/23/EEC and

89/336/EEC

TUV-GS to EN 61010-1

EN 61326 Amd's 1 & 2

Weight Approximately 14.33 lbs. (6.5 kg)

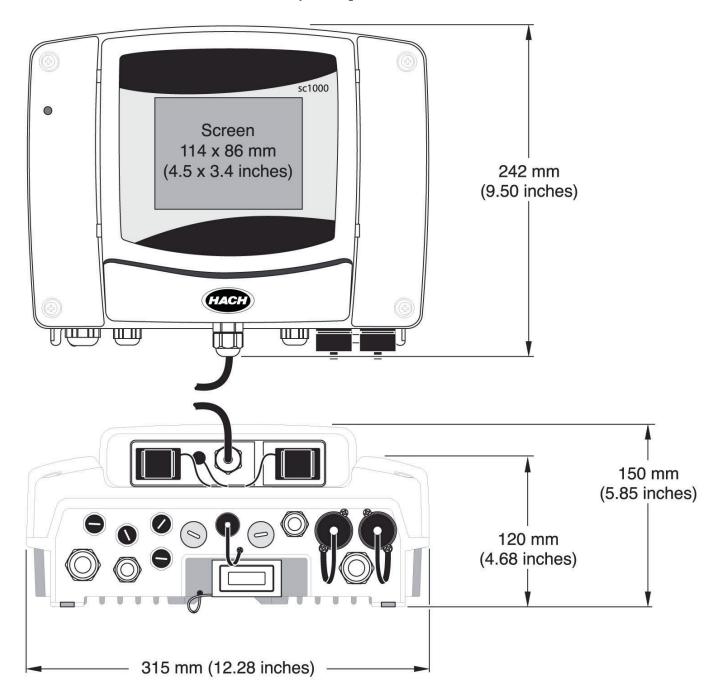
depending on configuration

Warranty 1 year

*Subject to change without notice.

Dimensions

The sc1000 controller unit can be installed on a pole, wall, or a floor stand. No tools are needed to connect the controller unit to any Hach digital sensor.



Ordering Information

sc1000 Display Modules

LXV402.99.00002 sc1000 Display Module

LXV402.99.01002sc1000 Display Module with GSM/GPRS ProtocolLXV402.99.10002sc1000 Display Module with Modbus® TCP/IP ProtocolLXV402.99.12002sc1000 Display Module with Modbus® TCP/IP and

GSM/GPRS Protocols

sc1000 Probe Modules

LXV400.99.1R572 sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In,

4 Relays, 110-230V

LXV400.99.1B572 sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In,

4 Relays, Modbus® RS485, 110-230V

LXV400.99.1F572 sc1000 Probe Module, 4 sensors, 4 mA Out, 4 mA In,

4 Relays, Profibus® DP, 110-230V

LXV400.99.1R582 sc1000 Probe Module, 6 sensors, 4 mA Out, 4 mA In,

4 Relays, 110-230V

LXV400.99.1H082 sc1000 Probe Module, 6 sensors, Prognosys Software,

Modbus® RS485, 110-230V

LXV400.99.1G082 sc1000 Probe Module, 6 Sensors, Prognosys Software,

110-230V

Note: Additional Probe Module configurations are available.

Please contact Hach Technical Support or your Hach representative.



YAB021 sc1000 Internal Modbus® RS485 Card

YAB020 sc1000 Internal Profibus® Card
YAB076 sc1000 Internal Relay Card

YAB018 sc1000 Internal 0/4-20 mA Analog/Digital Inputs Card
YAB019 sc1000 Internal 0/4-20 mA Analog/Digital Outputs Card

Accessories

hach.com

6169900 sc1000 Panel Mount Kit **LZX958** sc1000 Sun Shield

LZY598 Modbus® TCP/IP License Kit for Field Upgrade

(Display Module serial number required when ordering)

LZY488 sc1000 Bus Cable for Flexible Installations (Order per foot)
 LZY489 sc1000 Bus Cable for Fixed Installations (Order per foot)
 5448800 North American Power Cord Kit with Strain Relief, 125V
 5448900 European Power Cord Kit with Strain Relief, 230V



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