

SC1000 Multi-Parameter Universal Controller

Applications

- Wastewater
- Drinking Water
- 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 controller, 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.

Technical Data*

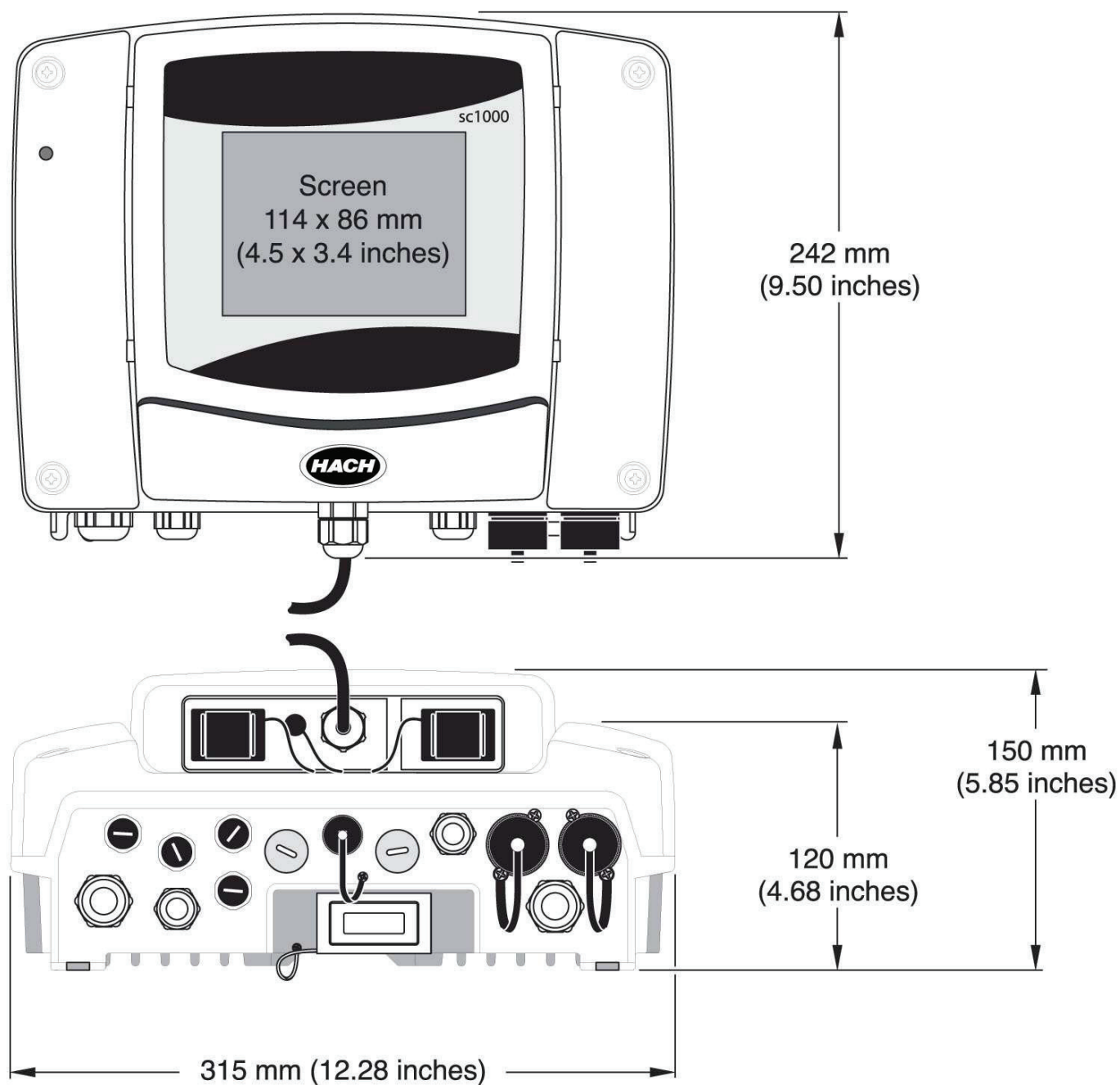
Operating Temperature Range	-20 to 55 °C (-4 to 131 °F), 0 to 95% relative humidity, non-condensing
Storage Conditions	-20 to 70 °C (-4 to 158 °F), 0 to 95% relative humidity, non-condensing
Power Requirements (Voltage)	100 - 240 V AC, 24 V DC
Power Requirements (Hz)	50/60 Hz
Display	¼ inch VGA graphical backlit TFT color Glas/Glas-Touch screen, high resistance 320 x 240 pixels
Display Viewing Area	11.4 x 8.6 cm (4.5 x 3.4 in)
Alarm	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 analogue 0-20 mA, maximum impedance 500 Ohms per probe module. Additional inputs are available with additional probe modules.
Output	Up to 12 analogue 0/4-20 mA, maximum impedance 500 Ohms per probe module. Additional analogue outputs with additional probe modules. Optional digital communications via Modbus (RS485) and Profibus DP/V1.
Analog 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
Dimensions (H x W x D)	250 mm x 315 mm x 150 mm
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)

*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.



Order Information

SC1000 Display Modules

LXV402.99.00002	SC1000 Display Module
LXV402.99.01002	SC1000 Display Module with GSM
LXV402.99.10002	SC1000 Display Module with Modbus® TCP/IP Protocol
LXV402.99.12002	SC1000 Display Module with Modbus® TCP/IP and GSM/GPRS Protocols

SC1000 Probe Modules

LXV400.99.1R572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1B572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, Modbus® RS485, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1F572	SC1000 Probe Module, 4 Sensors, 4x 4-20mA Out, 4x 4-20mA In, Profibus® DP, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1R582	SC1000 Probe Module, 6 Sensors, 4x 4-20mA Out, 4x 4-20mA In, 4x Relays, 100-240 V AC with Conduits
LXV400.99.1H082	SC1000 Probe Module, 6 Sensors, Prognosys, Modbus® RS485, 100-240 V AC with Conduits
LXV400.99.1G082	SC1000 Probe Module, 6 Sensors, Prognosys, 100-240 V AC with Conduits

*Note: Additional Probe Module configurations are available.
Please contact your local Hach representative.*

Network and Communication Cards

YAB021	SC1000 Internal Modbus® RS485 Card
YAB020	SC1000 Internal Profibus® DP 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

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, 125 V
5448900	European power cord kit with strain relief, 230 V



t +61 2 9894 4511
e sales@aqualab.com.au
w www.aqualab.com.au

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