



SC4500 Controller, Ethernet IP, 2 mA Inputs, 24 VDC, without plug

Product #:

LXV525.99Z07441

AED Price:

Contact Hach

Ready for Now. Ready for the Future.

Digital controller for up to two compatible instruments.

Technologies are advancing rapidly, providing new levels of convenience, accuracy, and efficiency. Which is exactly why the SC4500 Controller from Hach® is designed to integrate easily into your current system while allowing you to upgrade as your capabilities advance, without having to replace inventory. With a wide range of analog and digital connectivity options and the availability of intelligent instrument and data management features, the SC4500 unlocks the future, today.

Easy Adoption

The familiar experience of a modern touchscreen, the ability to use your current Hach sensors, and the same footprint as the SC200, make installation and integration of the SC4500 Controller seamless.

No Time for Downtime

The SC4500's built-in predictive diagnostic software ensures measurement confidence and reduces the risk of unexpected equipment downtime by enabling proactive maintenance planning via MSM, including step-by-step instructions.

The Connectivity Options You Need

The Controller provides local communication to SCADA or a PLC, as well as remote access through a secure, cloud-based connectivity option to integrate with Claros, the Water Intelligence System from Hach. From analog and advanced digital protocols to Wi-Fi, cellular or LAN, the SC4500 gives you the flexibility to adapt in a rapidly changing world.

The power of Hach's real time controls (RTC) software is now hosted on the SC4500 controller. Take advantage of the potential energy, chemical and labor savings, from a simple and environmentally friendly solution.

Specifications

Altitude: 3000 m maximum

Analogue output functional mode: Linear, PID

Communication (optional): Analog:

Five 0-20 mA or 4-20 mA analog outputs on each analog output module

Up to two analog Input modules (0-20 mA or 4-20 mA). Each input module replaces a digital sensor input.

Digital:

Profibus DPV1 module

Modbus TCP

Profinet IO module

Ethernet IP module

Compatible instruments:

Compatible Sensors and Analysers / Software Version (Release Year)

Amtax sc / V2.30 (2018) or higher

A-ISE sc / V1.02 or higher

AN-ISE sc / V1.08 (2013) or higher

N-ISE sc / V1.02 or higher

Nitratax clear sc, Nitratax eco sc, Nitratax plus sc / V3.13 (2013) or higher

NT3100sc/NT3200sc

Phosphax sc / V2.30 (2018) or higher

Phosphax sc LR/MR/HR / V1.01 (2018) or higher

TSS sc / V41.73 (2013) or higher

Solitax sc / V2.20 (2013) or higher

TU5300sc, TU5400sc / V1.34 (2017) or higher

SS7 sc (in Bypass) / V1.01 (2006) or higher

Ultraturb sc / V3.06 (2017) or higher

1720E / V2.10 (2006) or higher

Sonatax sc / V1.15 (2016) or higher

CL17sc / V2.7 (2019) or higher

CL10sc / V1.14 (2013) or higher

9184sc, 9185sc, 9187sc* / V2.03 (2013) or higher

Uvas plus sc / V3.01 (2017) or higher

LDO 2 sc* / V1.22 (2013) or higher

3798sc* / V2.03 (2013) or higher

3700sc + Inductive Conductive Digital 6120800 / V3.00 (2017) or higher

3422sc + Contacting Conductive Digital 6120700 / V3.00 or higher

3700 analog + Conductivity Module LXZ525.99.D0004

3400 analog + Conductivity Module LXZ525.99.D0004

pHD sc*, pHD-S sc / V3.10 (2016) or higher

1200-S sc* / V2.04 (2013) or higher

pHD analog + Digital Gateway 6120500 / V3.00 (2017) or higher

pHD analog + pH/ORP Module LXZ525.99.D0003

RC and PC analog sensor + Digital Gateway for conventional analog pH and ORP sensors
6120600 / V3.00 (2017) or higher

RC and PC analog + pH/ORP Module LXZ525.99.D0003

8362sc* / V3.00 (2017) or higher

Polymetron pH/ORP analog + Ultrapure pH/ORP Module LXZ525.99.D0007

Polymetron Conductivity analog + Ultrapure Conductivity Module LXZ525.99.D0006

GS1440 and GS2440EX Sensors H₂S

FP360 sc / V1 or higher

*Hardware Version1 of instrument is not supported

Compatible network technologies:

GSM 3G/4G (e.g. AT&T, T-Mobile, Rogers, Vodafone etc.)

CDMA (e.g. Verizon)

Compliance certifications:

CE, ETL certified to UL and CSA safety standards (with all sensor types), FCC, ISED, KC, RCM, EAC, UKCA, SABS, C # (Morocco)

Conduit openings:

½" NPT conduit

Description:

Microprocessor-controlled and menu-driven controller that operates the sensor

Dimensions:

½ DIN - 144 x 144 x 192 mm (5.7 x 5.7 x 7.6 in.)

Display:

3.5-inch TFT colour display with capacitive touchpad

Enclosure waterproof rating:

UL50E type 4X, IEC/EN 60529–IP 66, NEMA 250 type 4X

Metal enclosure with a corrosion-resistant finish

Indoor/Outdoor:

Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof

Installation category:

Category II

Material:

Polycarbonate, aluminum (powder coated), stainless steel

Measurements:

Two device digital SC connectors

Mounting:

Wall, Pole, or Panel Mounting

Network connectivity:

LAN: Two Ethernet connectors (10/100 Mbps)

Cellular: External 4G

Wi-Fi

Operating temperature range:

-20 to 60 °C (-4 to 140 °F) (8 W (AC)/9 W (DC) sensor load)

-20 to 45 °C (-4 to 113 °F) (28 W (AC)/20 W (DC) sensor load)

Linear derating between 45 and 60 °C (-1.33 W/°C)

Output:

Ethernet IP

Pollution degree:

4

Power requirements (Voltage):

18-28 VDC; 2.5 A

Power supply:

Without plug 24 VDC

Protection class:

I, connected to protective earth

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|---------------------|---|
| Relays: | Two relays (SPDT); Wire gauge: 0.75 to 1.5 mm ² (18 to 16 AWG) AC controller Maximum switching voltage: 100 - 240 VAC Maximum switching current: 5 A Resistive/1 A Pilot Duty Maximum switching power: 1200 VA Resistive/360 VA Pilot Duty DC controller Maximum switching voltage: 30 VAC or 42 VDC Maximum switching current: 4 A Resistive/1 A Pilot Duty Maximum switching power: 125 W Resistive/28 W Pilot Duty |
| Sensor input: | mA Input |
| Software available: | Non-Claros |
| Storage conditions: | -20 to 70 °C, 0 - 95% relative humidity, non-condensing |
| USB Port: | Used for data download and software upload. The controller records approximately 20,000 data points for each connected sensor. |
| Warranty: | 24 months |
| Weight: | 1.7 kg (controller only, w/o modules) |
| What's included?: | SC4500 Controller, Non-Claros, without plug 24 VDC; includes mounting hardware |

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