

Digital Controller SC4500



Ready for Now. Ready for the Future.

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 is Smart Monitoring enabled and provides local communication to SCADA or a PLC. 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.

Order Information

Controllers

LXV525.99A11551	SC4500 Controller, Prognosys, 5x mA Output, 2 Digital Sensors, 100-240 VAC, without power cord
LXV525.99E11551	SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, US plug
LXV525.99A11541	SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 1 mA Input, without plug
LXV525.99E11541	SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 1 mA Input, US plug
LXV525.99AA1551	SC4500 Controller, Smart Monitoring enabled, 5x mA Output, 2 Digital Sensors, 100-240 VAC, without power cord
LXV525.99EA1551	SC4500 Controller, Smart Monitoring enabled, 5x mA Output, 2 digital Sensors, US plug
LXV525.99AA1541	SC4500 Controller, Smart Monitoring enabled, 5x mA Output, 1 digital Sensor, 1 mA Input, without plug
LXV525.99EA1541	SC4500 Controller, Smart Monitoring enabled, 5x mA Output, 1 digital Sensor, 1 mA Input, US plug

Additional configurations are available. Please contact Hach Technical Support or your Hach representative.

Accessories

LXZ524.97.00042	SC4x00 Input Module
LXZ525.99.D0002	SC4x00 mA Output Module (5 Outputs)
LXZ525.99.C0002	SC4500 Ethernet IP Upgrade Kit
LXZ525.99.C0003	SC4500 LAN Connector Upgrade Kit
LXZ524.99.00004	SC4x00 UV Protection Screen
LXZ524.99.00005	SC4x00 UV Protection Screen with Sunroof
LXZ525.99.D0003	SC4500 pH/ORP Module
LXZ525.99.D0004	SC4500 Conductivity Module
LXZ525.99.D0006	SC4500 Ultrapure pH/ORP Module
LXZ525.99.D0007	SC4500 Ultrapure Conductivity Module
LXZ525.97.D0008	SC4500 Modbus RS232/RS485 Module

Please visit hach.com for a complete overview of accessories and spare parts.

Learn More



Technical Data*

Description	Microprocessor-controlled and menu-driven controller that operates the sensor	Communication (optional)	Analog: Five 0-20 mA or 4-20 mA analog outputs on each analog output module
Dimensions	½ DIN - 144 x 144 x 192 mm (5.7 x 5.7 x 7.6 in.)		Up to two analog Input modules (0-20 mA or 4-20 mA). Each input module replaces a digital sensor input.
Weight	3.7 lb (controller only, w/o modules)		Digital: Profibus DPV1 module
Display	3.5-inch TFT colour display with capacitive touchpad		Modbus TCP
Enclosure Rating	UL50E type 4X, IEC/EN 60529-IP 66, NEMA 250 type 4X Metal enclosure with a corrosion-resistant finish	Network Connectivity	Profinet IO module
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)		Ethernet IP module
Storage Conditions	-20 - 70 °C (-4 - 158 °F), 0 - 95% relative humidity, non-condensing		LAN: Two Ethernet connectors (10/100 Mbps) Cellular: External 4G Wi-Fi
Altitude	3000 m (9842 ft) maximum		Used for data download and software upload. The controller records approximately 20,000 data points for each connected sensor.
Installation Category	Category II	USB Port	CE. ETL certified to UL and CSA safety standards (with all sensor types), FCC, ISED, KC, RCM, EAC, UKCA, SABS, C م (Morocco)
Indoor/Outdoor	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof	Compliance Certifications	GSM 3G/4G (e.g. AT&T, T-Mobile, Rogers, Vodafone etc.)
Pollution Degree	4	Compatible Network Technologies	CDMA (e.g. Verizon)
Protection Class	I, connected to protective earth	<i>*Subject to change without notice.</i>	
Power requirements	AC controller: 100-240 VAC ±10%, 50/60 Hz; 1 A (28 W sensor load) DC controller: 24 VDC +15% -20%; 2.5 A (20 W sensor load)		
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		