



# SC4500 Controller, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord

**Product #:** ZAR Price: No availability shown LXV525.99A01551

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<sup>®</sup> 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.

### **Specifications**

Altitude: Analogue Output Functional Mode: Communication (optional):	3000 m maximum Linear, PID 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
Compatible Instruments:	Ethernet IP module 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 $H_2S$
	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:	1/2" 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 rating:	UL50E type 4X, IEC/EN 60529–IP 66, NEMA 250 type 4X
	Metal enclosure with a corrosion-resistant finish
Indoor/Outdoor:	Metal enclosure with a corrosion-resistant finish Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof
Indoor/Outdoor: Installation category:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or
	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof
Installation category:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II
Installation category: Material Enclosures:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel
Installation category: Material Enclosures: Measurements:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel Two device digital SC connectors
Installation category: Material Enclosures: Measurements: Mounting:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel Two device digital SC connectors Wall, Pole, or Panel Mounting
Installation category: Material Enclosures: Measurements: Mounting:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel Two device digital SC connectors Wall, Pole, or Panel Mounting LAN: Two Ethernet connectors (10/100 Mbps) Cellular: External 4G
Installation category: Material Enclosures: Measurements: Mounting:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel Two device digital SC connectors Wall, Pole, or Panel Mounting LAN: Two Ethernet connectors (10/100 Mbps)
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroof Category II Polycarbonate, aluminum (powder coated), stainless steel Two device digital SC connectors Wall, Pole, or Panel Mounting LAN: Two Ethernet connectors (10/100 Mbps) Cellular: External 4G Wi-Fi -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)
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)5x mA Output
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)Sx mA Output4
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range: Outputs: Pollution Degree: Power requirements (Voltage):	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)Sx mA Output4100-240 VAC ±10%, 50/60 Hz; 1 A
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range: Outputs: Pollution Degree: Power requirements (Voltage):	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)Sr mA Output4100-240 VAC ±10%, 50/60 Hz; 1 AWithout power cord
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Network connectivity: Operating temperature range: Outputs: Pollution Degree: Power requirements (Voltage): Power supply: Protection Class:	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-20 to 60 °C (-4 to 140 °F) (8 W (AC)/9 W (DC) sensor load)Linear derating between 45 and 60 °C (-1.33 W/°C)Sr mA Output4100-240 VAC ± 10%, 50/60 Hz; 1 AWithout power cordI, connected to protective earth
Installation category: Material Enclosures: Measurements: Mounting: Network connectivity: Operating temperature range: Outputs: Pollution Degree: Power requirements (Voltage):	Outdoor installation in direct sunlight or UV radiation requires UV protection screen and/or sunroofCategory IIPolycarbonate, aluminum (powder coated), stainless steelTwo device digital SC connectorsWall, Pole, or Panel MountingLAN: Two Ethernet connectors (10/100 Mbps)Cellular: External 4GWi-Fi-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)Sr mA Output4100-240 VAC ±10%, 50/60 Hz; 1 AWithout power cord

	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
Sensor Input #1:	Digital
Sensor Input #2:	Digital
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:	12 months
Weight:	1.7 kg (controller only, w/o modules)
What's included?:	SC4500 Controller, Non-Claros, without power cord; includes mounting hardware

# What's included?

SC4500 Controller, Non-Claros, without power cord; includes mounting hardware