Zaber Technologies Inc.
#2 - 605 West Kent Ave.
Vancouver, BC

1-604-569-3780 *Direct*
1-888-276-8033 *Toll Free*
1-604-648-8033 *Fax*

X-SCA4 Datasheet



• Easily integrate a wide variety of DC components with the Zaber ecosystem including valves, solenoids, heating elements, pumps, optical shutters, DC motors, and more
• Interface with all connected components through our free, intuitive software and API
• 4 independent channels can power nearly any DC load under 4 amps
• Supports manual, PID, and 2-state (on/off) control using either temperature or voltage feedback
• 4 isolated digital inputs and 2 isolated digital outputs for high speed triggers, alarms, or general purpose I/O
• Connect and monitor over ethernet from anywhere in the world
• Output voltage configurable from 1.5 V to 48 V DC
• E-Stop input allows for immediate interruption of power to connected devices
• Accessories include: optional DIN rail mounting and high precision thermistors

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X-SCA4 Overview

The X-SCA4 process controller makes it much easier and less expensive to integrate Zaber linear stages, rotary stages, and gantry systems with a wide range of components. Choose from thousands of third party components including valves, solenoids, heating elements, pumps, optical shutters, DC motors and more, even if they come from different vendors. You can control all four connected components with our easy-to-use Zaber Launcher application or the open-source and thoroughly documented Zaber Motion Library API. You no longer need to purchase multiple controllers or interface with multiple programming languages. This will save you time, headache, and cost.

In addition to simply turning inductive or resistive loads on and off, the X-SCA4 supports PID and 2-state (on/off) control using either temperature or voltage as feedback. Two high precision thermistor inputs are available that work with optional plug in thermistor sensors along with two more general purpose analog voltage inputs.

Up to 4 independent outputs can be driven at the same time, all with different output voltages, with feedback or without. The input voltage range is from 12 V to 48 V DC and the output voltage can be set from 1.5 V up to 95% of the input voltage. Each channel can deliver up to 4 Amps and the total power delivered can be up to 230 Watts across all 4 channels.

The optional E-stop input offers the ability to instantly remove power from the outputs in the event of an unsafe condition. The controller provides 4 channels of isolated digital inputs and 2 channels of isolated digital outputs that can be used as general purpose I/O or as high speed triggers.

Easily communicate with the device and connected components using our free software, either our Zaber Launcher application or Zaber Motion Library with APIs for most popular languages. Third-party terminal programs that can communicate over a serial port can also be used. Like all Zaber devices, multiple X-SCA4 controllers can be daisy-chained with a single power supply making it easy to expand the number of driver channels.

For more information visit: https://www.zaber.com/products/controllers-joysticks/X-SCA4?part=X-SCA4

X-SCA4 Drawings

• X-SCA4.png (Drawing for the X-SCA4)

• View all drawings and documents at zaber.com

X-SCA4 Specifications

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Overview

Specification	Value
Weight	0.2 kg (0.441 lb)

Power and Communication

Specification	Value
Communication Interface	RS-232, Ethernet (10/100 Mbit/s)
Communication Protocol	Zaber ASCII
Data Cable Connection	Locking 4-pin M8, Ethernet
Power Supply	12 to 48 VDC
Power Plug	5.0 mm Screw Terminal
Maximum Current Draw	4800 mA

Analog & Digital I/O

Specification	Value
Maximum Current Per Channel	3.8 amps
Number of Output Channels	4
Number of Temperature Sensor Inputs	2
Supported Temperature Sensor Types	HT03 - 10k thermistor
Isolated Digital Input	4
Isolated Digital Output	4
Analog Input	2
Analog Input Range	0-10 V
Analog Input Resolution	1 mV
E-Stop Input Range	12 to 48 V

Environmental & Compliance

Specification	Value
Operating Temperature Range	0 to 50 °C
CE Compliant	Yes
Vacuum Compatible	No

Contact

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