

# UI-3 Data Acquisition Interface

Versatile data acquisition and  
instrument control interface

The Universal Interface Module is a versatile data acquisition and instrument control interface. With eight high-resolution and wide-range analog inputs for measuring voltages, plus four versatile additional inputs that can measure temperature, voltage or resistance, it can handle the demands of complex experiments. Its eight digital outputs allow it to control a wide variety of instruments such as relays, solenoids and valves. Primarily designed to be used with Sable Systems' flagship Expedata data acquisition and analysis software, its open protocol allow users to deploy it in many other environments as well.

Other features include a 16-bit digital counter, two channels of voltage output (0-5V, 12 bits resolution), a pulse width modulation output, and an accessory voltage input. The UI-3 data acquisition interface is powered from the USB connection.

The UI series is widely used and a time-proven device in hundreds of research laboratories worldwide.



## FEATURES

User interface device

8 Channel, 16-bit bipolar analog input, with BNC connectors  
4 Channel, 16-bit thermistor input, with BNC connectors

8 Channel Digital Output, using DB-15 extension port

2 Channel 12-bit analog output, using DB-15 extension port  
USB interface, using USB Mini-B cable

CE Pre-Compliance tested



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## SPECIFICATIONS

<b>ACCURACY AND RESOLUTION</b>	-5.12V to +5.12V (8 main voltage inputs), -5 to 60.5 C (4 accessory inputs in temperature measurement mode), 0 to 5.12V (4 accessory inputs in voltage measurement mode), 10 ohms to 10 megohms (4 accessory inputs in resistance measurement mode)
<b>ANALOG OUTPUTS COUNTER</b>	Two, 12 bits resolution, 0 – 5V
<b>DIGITAL OUTPUTS</b>	One, 16 bits (rollover at 65536 counts)
<b>INTERFACE</b>	Eight, TTL level (off = 0V, on = 5V), short circuit proof USB
<b>OPERATING TEMPERATURE</b>	0 – 50 degrees C, relative humidity non-condensing Digital alphanumeric LCD
<b>PANEL DISPLAY</b>	Fully open; available upon request
<b>PROTOCOL</b>	RS-232-8N1; both polled and broadcast modes available
<b>SERIAL I/O SAMPLING RATE</b>	100 Hz/channel in normal operating mode; up to 1 kHz/channel with internal digital filtration turned off
<b>TECHNOLOGY</b>	Successive approximation analog to digital conversion (16 bits)
<b>USB COMPATIBILITY</b>	USB 3.0 or 2.0 for Windows 8.x & Windows 10; USB 2.0 only for Windows 7
<b>RECOMMENDED CALIBRATION INTERVAL</b>	1 Year
<b>POWER REQUIREMENTS</b>	Power from USB connection
<b>DIMENSIONS</b>	(W x D x H): 6 x 6 x 3 in. (17 x 15 x 7 cm)
<b>WEIGHT</b>	2 lbs (0.9 kg)



## ABOUT US

Sable Systems International designs and manufactures leading-edge gas, metabolic and behavioral measurement systems for calorimetry, respirometry, metabolic/behavioral phenotyping, and gas analysis. Our products enable the highest precision and resolution, optimum workflow and reliable performance – giving you utmost confidence in your results. By scientists, for scientists, Sable enables results that impact research and industry breakthroughs.



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