### MSR SENSOR READING UNIT

ELVEFLOW.COM/MICROFLUIDIC-FLOW-CONTROL-PRODUCTS/MICROFLUIDIC-FLOW-CONTROL-MODULE/MSR-MICROFLUIDIC-SENSOR-READER-V2/



## **AN ACQUISITION INTERFACE** FOR ALL SENSORS



The sensor reader is an interface allowing the **acquisition** of many kinds of **analog & digital sensors**, including Elveflow pressure sensors and flow sensors.

# ✓ MONITOR UP TO 4 SENSORS

✓ REAL-TIME CONTROL & FEEDBACK

#### **UNIQUE PERFORMANCES**

- > Fast acquisition frequency 1 kHz
- > From 9 to 16 bits resolution
- > Real-time control & feedback loops
- > Read simultaneously up to 4 sensors

#### **APPLICATIONS**

- > The Sensor Reader can be used to monitor flow rate, pressure, or other physical parameters on any type of flow control instrument (syringe pump, peristaltic pump, perfusion, pressure controller)
- It embeds two independent power supplies which allows the use of a wide variety of sensors simultaneousy, functionning with different voltages for their power supply

#### **TECHNICAL SPECIFICATIONS**

SENSOR READER UNIT	SPECIFICATIONS		
Number of sensors	4		
Sensor connectors	M8 female (4 pins)		
USB reading current min - max	100 mA - 500 mA		
Sensor power supplies voltage (2 power supplies tunable independently each of which feeding 2 sensors)	5 - 25 V		
Total power on the 4 channels	0.9 W		
SENSOR INPUTS			
Impedance	1 ΜΩ		
Acquisition frequency	1 Khz		
Acquisition resolution	from 9 to 16 bits		
Input range	0 - 10 V	0 - 5 V	0 - 1 V
Resolution (1 bit)	5 mV	2.5 mV	0.5 mV
Noise (full band)	5 mV rms	2.5 mV rms	0.5 mV rms
ANALOG LOW-PASS FILTER FUNCTION CHARACTERISTI	CS	' ·	
	60 Hz		
Cutoff frequency	3		

SENSOR READER SIZE without connectors (length x width x height): 91 x 69 x 29 mm WEIGHT: 320 g

Non-contractual information, may be changed without notice.