



PRODUCTS

# MEASUREMENT & DETECTION



# 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 simultaneously, functioning with different voltages for their power supply

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			
<b>SENSOR INPUTS</b>				
Impedance	1 MΩ			
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	
<b>ANALOG LOW-PASS FILTER FUNCTION CHARACTERISTICS</b>				
Cutoff frequency	60 Hz			
Filter order	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.