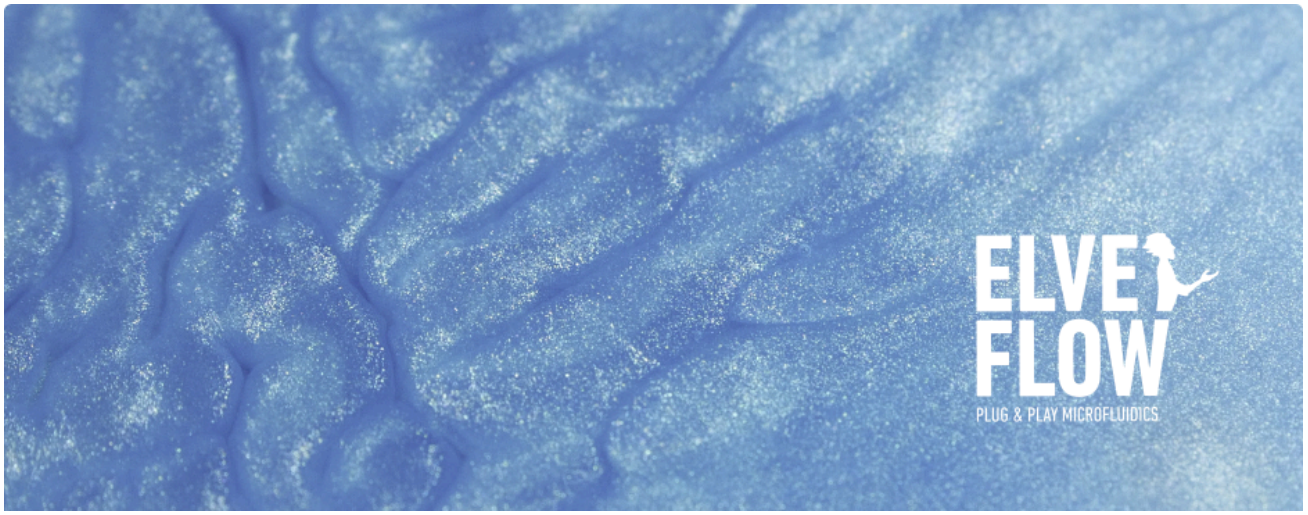


ADVANCED SENSOR HUB DATASHEET

Elveflow Advanced Sensor Hub connects up to 4 sensors to read and monitor sensor values.

Table of content

General specifications

Dimensions (mm)	**124 x 49 x 70 mm**
Weight (g)	**250 g**
Control Center connection	**M12 8 pins (shielded cable 25 cm recommended)**
Sensor communication	**I2C, Analog**
Sensor connection	**M8 4 pins (shielded cable 1 m recommended), or Terminal block (4 wires)**
Sensor compatibility	**Elveflow sensors (MFS, MPS, bubble detector and MFP) Analog sensors with 0/10V input signal and with up to 24V supply**
Number of sensor connections	**4**
Casing material	**Aluminium**
Mounting orientation	**Any**

Electrical specifications

Acquisition frequency	**200Hz**
Acquisition resolution (analog)	**16 bits**
Input range (analog)	**0 - 10V**
Resolution	**5 mV**
Sensor supply voltage (analog)	**5 to 24V**
Maximum power consumption (W)	**4W**
Maximum power / channel (W)	**0.9W**

Communication specifications

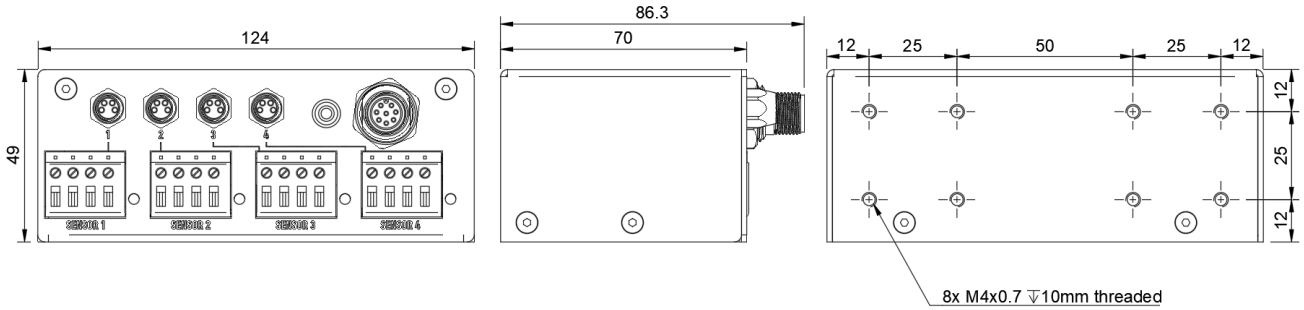
Interface	**M12 8 pins**
Communication type	**Universal Asynchronous Receiver-Transmitter (UART)**
Serial communication speed	**230400 bauds**

Control and monitoring

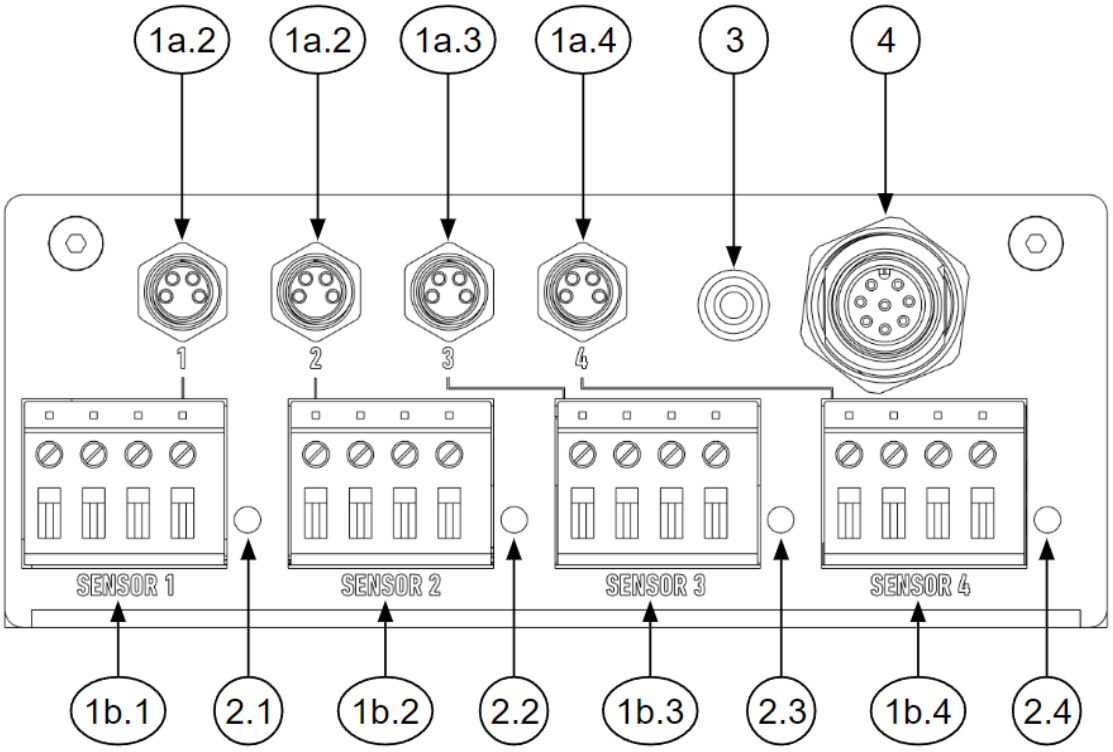
UART commands	**Sensor configuration & monitoring**
Software control	**ESI via a Advanced Control Center only**
Distributed PI regulation between a regulators module and a sensor on another module	**Yes**

Dimensional drawing

(Dimensions in mm)



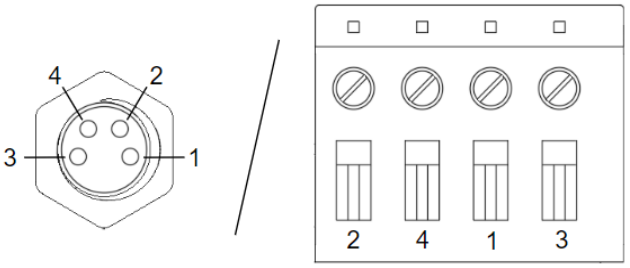
Connections



1.x	Sensor connection, channel #x	**1a : M8 female 4 pins**
		1b : Terminal block 4 pins
2.x	Sensor LED, channel #x	**Green LED - ON when sensor is communicating**
3	Communication LED	**Green LED - ON when communicating**
4	Connection to Advanced Control Center (or Advanced Hub)	**M12 male - 8 pins**

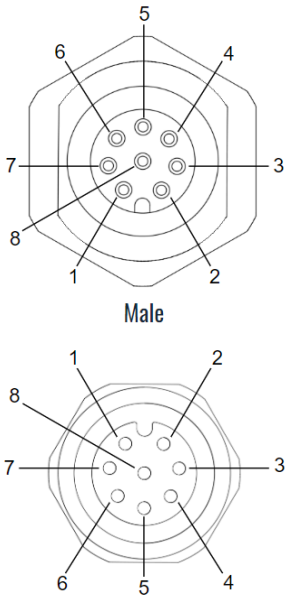
Sensor wiring

1	**Vcc 5-24V (power supply)**
2	**SLC (clock line for I2C)**
3	**Ground**
4	**Data line (Analog signal / SDA for I2C)**



M12 Pin out

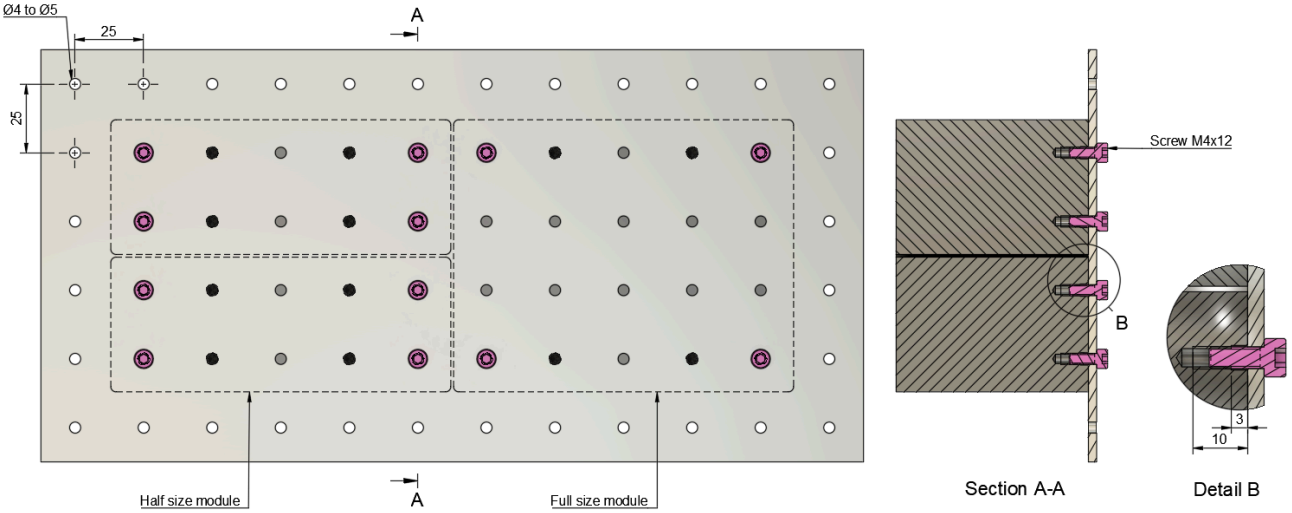
1	**RX**
2	**TX**
3	**Ground**
4	/
5	**5V DC**
6	/
7	**Ground**
8	**24V DC**



Assembly recommendations

The module can be used in any orientation.

Assembly on standard perforated sheet metal



Assembly with brackets

Brackets are Elveflow custom parts that can be purchased with an Advanced system to assemble the modules together (see Advanced Assembly kit).