

# ADVANCED CONTROL CENTER DATASHEET



Elveflow Advanced Control Center controls up to 25 modules (by adding hubs), 4 valve ports integrated.

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## General specifications

Dimensions (mm)	<b>124 x 49 x 70 mm</b>
Weight (g)	<b>350 g</b>
Computer connection	<b>RS232 - DB-9</b>
Power connection	<b>DC power connector, Plug, 3A, 2.1mm, 12mm</b>
Number of module connections	<b>5</b>
Modules connections	<b>M12 8 pins (shielded cable 25 cm recommended)</b>
Number of controlled valves	<b>4</b>
Type of valves	<b>2 wires 24V</b>
Valves connection type	<b>Terminal block (2 wires)</b>
Casing material	<b>Aluminium</b>
Mounting orientation	<b>Any</b>
EMC Emission / Immunity	<b>Compliance to:</b> <b>EN 61000-4-2,4,5,6(B);</b> <b>EN IEC 61000-4-3(A);</b> <b>EN IEC 61000-4-11(B/C);</b> <b>EN 61000-3-2; class A;</b> <b>EN 61000-3-3;</b> <b>EN 55016-2-1,3; class B;</b>

## Electrical specifications

Input voltage (V)	<b>24V</b>
Maximum power consumption (W)	<b>40W</b>
Maximum current consumption (A)	<b>1.67A Peak</b>
Typical power (W)	<b>2W</b>
Maximum output power / channel (W)	<b>12W</b>
Typical power / channel (W)	<b>1.7W</b>
Maximum valve power / valve channel (W)	<b>4.8W</b>
Maximum current / valve channel (A)	<b>0.2A with 24V command</b>

## Provided power supply specifications

Supply - Voltage range (V)	<b>100 to 240 VAC</b>
Supply - AC frequency (Hz)	<b>50 to 60 Hz</b>
Output - Maximum current output (A)	<b>1.67A Peak</b>
Output - Maximum power (W)	<b>40W</b>

## Communication specifications

Interface	<b>RS232</b>
Communication type	<b>Universal Asynchronous Receiver-Transmitter (UART)</b>
Serial communication speed	<b>115200 bauds</b>

## Control and monitoring

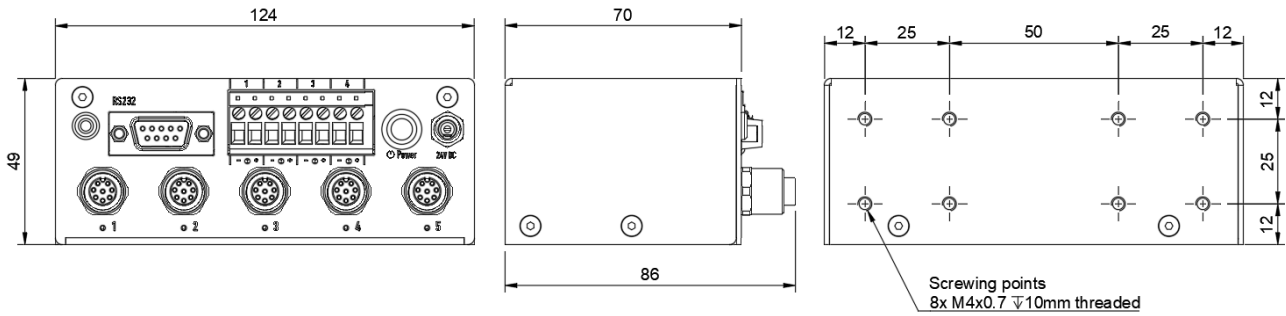
Access to modules	<b>UART commands to Control Center using the module Serial Number</b>
ESI compatibility	<b>Yes</b>
Number of channels available	<b>5, up to 25 using Advanced Hubs</b>
Distributed PI regulation between a regulators module and a sensor on another module	<b>Yes</b>
Internal measurement data logging	<b>No</b>

## Internal sequencer

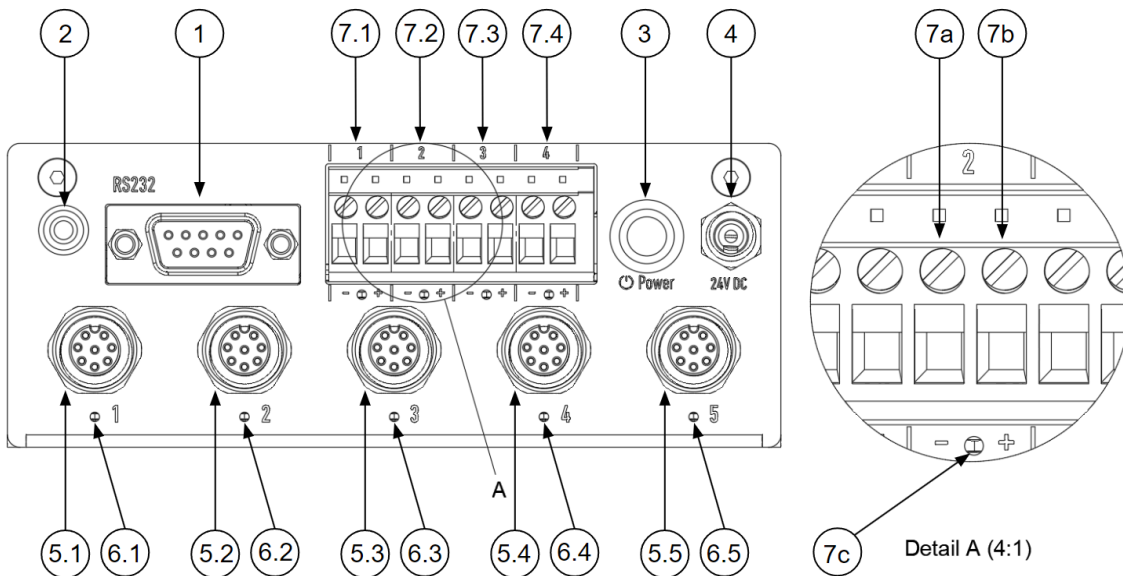
Autonomous from PC	<b>Yes</b>
Internal sequence storage	<b>Yes</b>
Setting to start the sequencer when the Control Center boots	<b>Yes</b>
Number of steps available per sequence	<b>256</b>
Number of sequencers available	<b>5</b>
Sequencers can run in parallel	<b>Yes</b>
Sequencers can play/pause/stop each other	<b>Yes</b>
Sequencers can be modified while running	<b>No</b>

# Dimensional drawing

(Dimensions in mm)



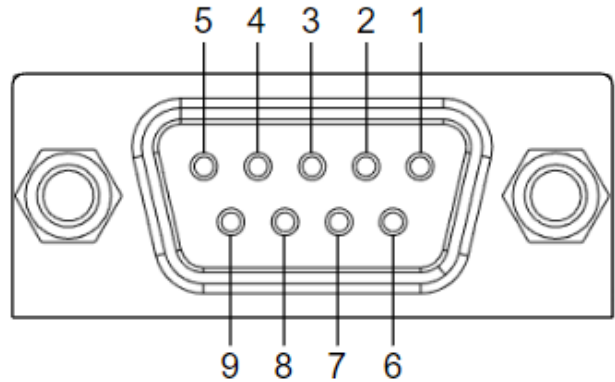
# Connections



1	Computer connection	<b>RS232</b>
2	Computer communication LED	<b>Green LED - ON when communicating</b>
3	Power button with LED	<b>Green LED - ON when device powered</b>
4	Power supply	<b>DC power connector, Plug, 3A, 2.1mm, 12mm</b>
5.x	Module connection channel #x	<b>M12 female - 8 pins</b>
6.x	Module channel #x communication LED	<b>Green LED - ON when communicating</b>
7.y	Valve connection channel #y 24V / 2 Watt (max)	<b>7a : Terminal block - (Ground)</b>
		<b>7b : Terminal block + (24V)</b>
		<b>7c : Green LED - ON : tension between blocks</b>

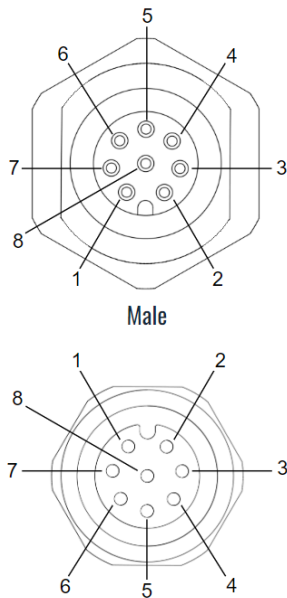
**RS-232 female connector pinout (device side)**

1	<b>not used</b>
2	<b>RX</b>
3	<b>TX</b>
4	<b>not used</b>
5	<b>GND</b>
6	<b>not used</b>
7	<b>RTS</b>
8	<b>CTS</b>
9	<b>not used</b>



**M12 Pin out**

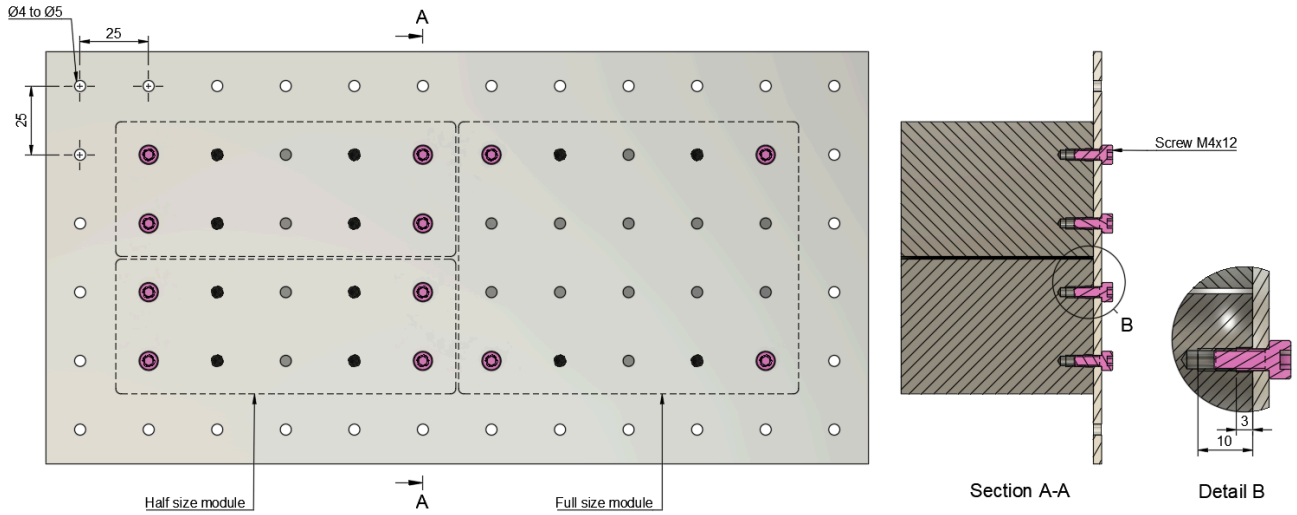
1	<b>RX</b>
2	<b>TX</b>
3	<b>Ground</b>
4	<b>/</b>
5	<b>5V DC</b>
6	<b>/</b>
7	<b>Ground</b>
8	<b>24V DC</b>



## 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).

