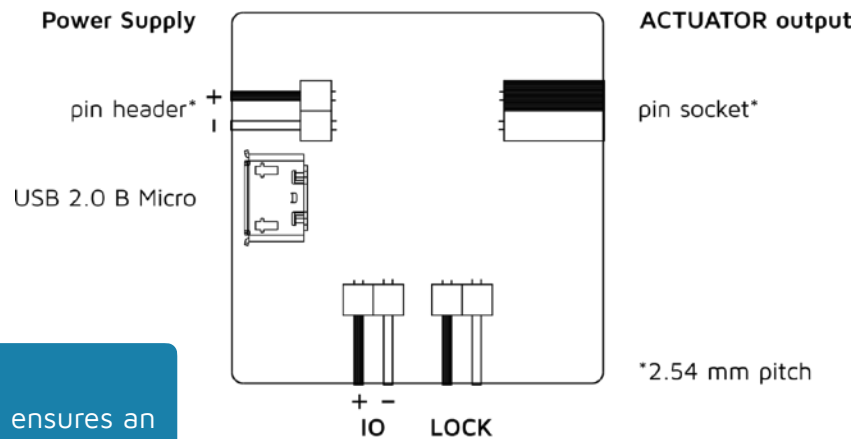
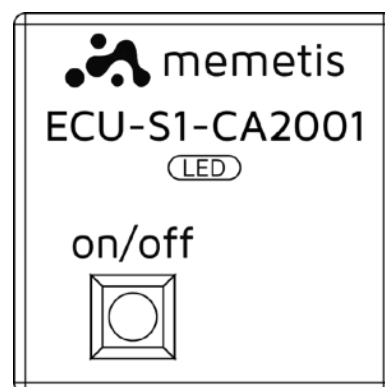


# Electronic Control Unit *Small*



The small electronic control unit (ECU-S1) ensures an easy start with memetis products by providing a constant output current specifically tailored to the respective memetis product.

The ECU-S1-CA2001 is specifically developed for the control of one memetis CA2001 chip actuator. It can be powered from USB B Micro or an external power supply, and has a wide input voltage range of 4.5 - 24 V.



## Contact Information

**memetis GmbH**  
 Gablonzer Str. 27  
 76185 Karlsruhe, Germany  
 Tel. +49 721 547000240  
 Email: [support@memetis.com](mailto:support@memetis.com)

### Specifications

Model ID	ECU-S1-CA2001
Power supply	<ul style="list-style-type: none"> <li>• 4.5 - 24 V DC, USB 2.0 Micro B Socket <b>OR</b></li> <li>• 2.54 mm pin header, direct internal connection</li> </ul> <b>Attention: do not use both at the same time.</b>
Max. power supply current (standby)	< 1.0 mA @ 4.5 - 24 V
Max. power supply current (output active)	Connected to memetis CA2001 chip actuator, 720 mA for 1.0 s then 232 mA @ 5 V, 290 mA for 1.0 s then 101 mA @ 12 V, 160 for 1.0 s mA then 60 mA @ 24 V, hardware rev. 1.5
ACTUATOR output	1.9 A peak current for 1.0 s then 1.1 A hold current, constant current source, 2.54 mm pin socket
IO input	0 - 20 V non-isolated digital input, 10 kΩ pull-down, HIGH enables ACTUATOR output, LOW disables it, 2.54 mm pin header
IO input threshold	LOW < 1 V, HIGH > 2.5 V
LOCK input	Short with jumper to place device in LOCK mode before connecting power, when locked ACTUATOR output will always be active, all user input is ignored, 2.54 mm pin header
ON/OFF push button	Pressing once enables ACTUATOR output, pressing again disables output
LED	Off when ACTUATOR output is disabled, permanently on when ACTUATOR output is active and output current in regulation, flashing when output current error detected
Temperature range	-20 °C - 60 °C
Dimensions	32 x 32 x 9.5 mm <sup>3</sup>

### Customized Electronic Solutions

Couldn't find what you were looking for? Or would you like a customised solution? memetis also develops customised electronic solutions, including the control of other components such as pumps and sensors to control complete modules. Just get in touch with us - we will be happy to support you!



**Further Information about Electronics**

Would you like to develop your own electronics? On this page you will find all electronics-related information on the operation of our valves - from initial product testing through to the sophisticated electronic integration of complex fluidic logics:

**Electronic support website**

**More memetis Products**

Normally closed Microvalves	Ultra-compact, low-power consuming and silent microvalves
Chip Actuators	Strong, linear actuators designed for mechanical cartridge actuation
Fluidic Valve Adapters	Direct tube connectors or threaded adapters with third-party fittings
ECU-P2	Programmable two channel electronic control unit

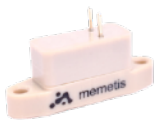


Figure 3: All products are available from the memetis online shop at [shop.memetis.com](http://shop.memetis.com)

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