

Precise. Rugged. Universal.

# Power Switching MiniModule

- ▶ Central power distribution for the entire measurement system
- ▶ Switching on and off selectively of measurement modules, data logger and further external devices
- ▶ Configurable gate input: KEY\_ON, switching voltage by the data logger, external voltage
- ▶ Buffering during ignition (optional)
- ▶ Operating temperature: -40 °C to +85 °C
- ▶ Robust aluminum housing: IP50
- ▶ Very compact design, adapted to CSM MiniModules

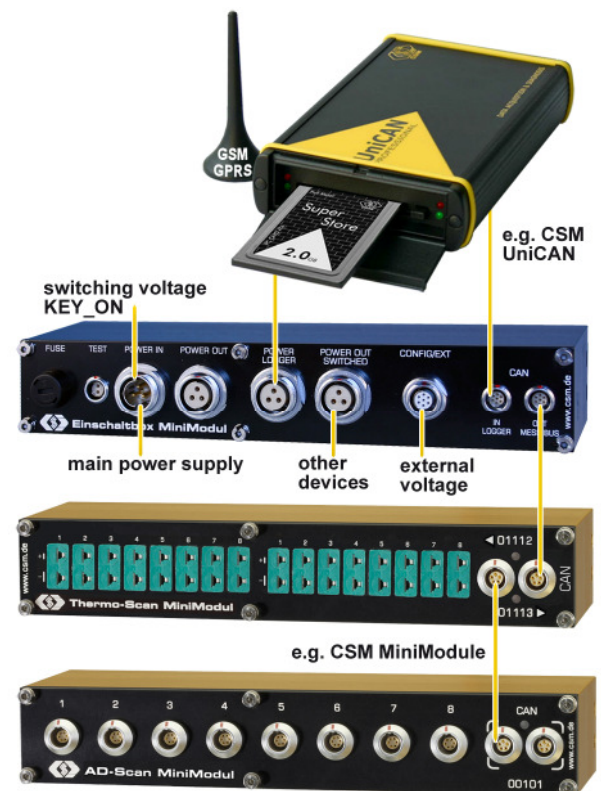


The Power Switching MiniModule selectively switches on and off a data logger and measurement modules. The Power Switching MiniModule can easily be configured for different application by use of the configuration plug. The power supply for a data logger and measurement modules is switched by KEY\_ON of the car (key on / off) or an external voltage. Alternatively, measurement modules and further external devices can also be switched using a signal supplied by the data logger.

Configuration	Gate input	Switched devices
A	KEY_ON	Logger, measurement modules and further external devices
B	KEY_ON	Logger
	Switching voltage by the Logger	Measurement modules and further external devices
C	KEY_ON or external	Logger
	Switching voltage by the Logger	Measurement modules and further external devices

Table with examples of configuration

To switch additional devices, the Power Switching MiniModule can simply be cascaded. High-quality semiconductor switches allow switching of currents up to 12 A.



Example of a CSM measurement system with data logger

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# Specifications Power Switching MiniModule

Technical data	Power Switching MiniModule	Power Switching MiniModule with buffering
<b>Inputs</b>	Power In Power Out Power Logger Power Out Switched CAN In Logger CAN Out Messbus Config/Ext Test	
<b>Power supply</b>	<b>approx. 5 V to 50 V DC</b>	
<b>Power consumption</b> Switching output off Switching output on Charge process SuperCaps	max. 50 $\mu$ A max. 15 mA –	typ. 2 mA typ. 17 mA max. 2,5 A temporary
Gate inputs	switch-on voltage: 4 V to 48 V input resistance: $\geq 10$ kOhm	
<b>Output</b> Power Out Power Logger/Power Out Switched	max. 12 A (unbuffered) max. 12 A (unbuffered)	max. 12 A (unbuffered) max. 35 W (buffered)
<b>Dimensions (W x H x D)</b> Weight	<b>approx. 200 x 35 x 51 mm</b>	
	approx. 430 g	approx. 550 g
<b>Operating temperature</b> Storage temperature Relative humidity	<b>-40 °C to +85 °C</b> -40 °C to +85 °C 5 % to 95 % (non-condensing)	
<b>Protection</b>	<b>IP50</b>	
<b>Housing</b>	Aluminium, blue anodized	

Technical data	Power Switching MiniModule	Power Switching MiniModule with buffering
<b>Buffer capability</b> <sup>1)</sup> Output power Time period Starting voltage Final voltage	–	35 W <sup>2)</sup> ≥ 500 ms <sup>2)</sup> approx. 9 V approx. 7 V
<b>Conservation of buffer capability</b> <sup>1)</sup> with U <sub>BATT</sub> on with U <sub>BATT</sub> off	–	unlimited reduction of starting voltage by approx. 0,2 V/h
<b>Recharge</b> <sup>1)</sup> After discharge more than 500 ms After complete discharge  Minimum vehicle voltage for complete charge with limit stop	–	approx. 10 s approx. 20 s  12 V
<b>Conformity</b>	CE	

<sup>1)</sup> Buffering is only active, if KEY\_ON is on.

<sup>2)</sup> Having less output power, the time period extends accordingly.

**Part numbers:**

ART0202820 (EBMM Industrial) / ART0202821 (EBMM Industrial with buffering)

For further technical information and references please ask our technical sales and distribution.