**Product description**

The measurement module ADMM 8 pro2 is especially designed for the use of ratiometric sensors and sensors with a power supply voltage up to 30 V DC. With its high-precision, galvanically isolated sensor excitation it is not only suited for a wide range of active sensors but also for sensors with ground-referenced signal inputs.

**Shipping content**
- Measurement module ADMM 8 pro2
- Configuration software CSMconfig
- Documentation
- Calibration certificate in accordance with DIN EN ISO/IEC 17025

**Maintenance**
- Calibration every 12 months recommended

**Accessories**
- See datasheet "CAN Accessories"

**Key features**
- 8 differential voltage inputs, galvanically isolated
- Measurement inputs adjustable per channel from ±10 mV to ±60 V
- High-precision bipolar, galvanically isolated sensor excitation, adjustable per channel
- Sensor linearization with axis points
## Technical data

<table>
<thead>
<tr>
<th>Type designation</th>
<th>ADMM 8 pro2</th>
</tr>
</thead>
</table>

### Measurement inputs
- **8 analog inputs**
- **Measurement ranges**: ±10, ±20, ±50, ±100, ±200, ±500 mV and ±1, ±2, ±5, ±10, ±20, ±60 V
- **Internal resolution**: 16 bit
- **Internal sampling rate per ch.**: 2 kHz
- **Measurement data rate per ch**: 1, 2, 5, 10, 20, 50, 100, 200, 500 Hz and 1 kHz, 2 kHz

### HW input filter
- Low-pass filter 3rd order, approx. 500 Hz

### SW input filter
- Switchable 6th order Butterworth filter, range: 0.1 Hz to 500 Hz, automatically adjusted to measurement data rate, alternatively: threshold frequency adjustable per channel

### Axis points
- 8 tables, each with up to 32 axis points

### Input protection ¹)
- **Operational safety**
- **Device safety**: ±60 V permanent, ±100 V permanent, additional ESD protection

### LED indicator per channel
- Sensor excitation on (green) / short-circuit (red)

### Gain error
- **at 25 °C**: max. ±0.05 % of measured value
- **Temperature drift**: max. ±10 ppm/K

### Sensor excitation
- Switchable, galvanically isolated and adjustable per channel ²)
- **Voltage**: ±5, ±8, ±10, ±12, ±15 V DC, therefore also 10, 16, 20, 24, 30 V DC
- **Current**: typ. ±30 mA per channel

### Galvanic isolation ³)
- No safety isolation in terms of high-voltage applications

<table>
<thead>
<tr>
<th>Channel / channel</th>
<th>500 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN / channel</td>
<td>500 V</td>
</tr>
<tr>
<td>CAN / power supply</td>
<td>500 V</td>
</tr>
<tr>
<td>Power supply / sensor excitation</td>
<td>500 V</td>
</tr>
</tbody>
</table>

### CAN interface
- CAN 2.0B (active), High Speed (ISO 11898-2:2003)
- 125 kbit/s to max. 1 Mbit/s, data transfer free running

### Configuration
- Via CAN bus using CSMconfig or CSM INCA AddOn, settings and configurations stored in the module

### Power supply
- **Minimum**: 6 V DC (-10 %)
- **Maximum**: 45 V DC (+10 %)
- **Power consumption**: typ. 1.8 W (without sensor excitation)
- **LED indicator**: power (green), status (red)

[www.csm.de](http://www.csm.de)
<table>
<thead>
<tr>
<th><strong>Type designation</strong></th>
<th>ADMM 8 pro2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing</strong></td>
<td>aluminium, gold anodized</td>
</tr>
<tr>
<td><strong>Protection class</strong></td>
<td>IP67</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>approx. 500 g</td>
</tr>
<tr>
<td><strong>Dimensions (w × h × d)</strong></td>
<td>approx. 200 × 35 × 50 mm, approx. 200 × 40 × 50 mm (Slide Case)</td>
</tr>
</tbody>
</table>

**Connectors**
- **CAN / power supply** LEMO 0B, 5-pole, code G
- **Signal inputs** LEMO 0B, 6-pole, code A

**Operating and storage conditions**
- **Operating temperature range** -40 °C to +125 °C
- **Relative humidity** 5 % to 95 %
- **Pollution degree** 3
- **Storage temperature** -55 °C to +150 °C

**Conformity**

---

1. Observe information regarding the intended use. See CSM document "Safety Instructions MiniModule".
2. In case of full load (7.2 W) a power supply > 8 V is required, see "Application Note".
3. These MiniModules are designed for measurements in vehicles with 12 V, 24 V, or 48 V on-board power supply systems. The maximum operating voltage at the measurement inputs is 60 V. Not suitable to be directly connected to systems with higher operating voltages, e.g. high-voltage batteries of hybrid or electric vehicles.
4. Optionally available in other variants

---

### additional products

**ADMM pro**
The ADMM pro measurement modules cover an extremely wide range of application. They can be used for "simple" voltage measurement, high-precision current measurement (via shunts), measurement of very low voltages (mV level), and the acquisition of higher frequency signals with measurement data rates up to 10 kHz.

**ECAT ADMM 4**
The EtherCAT® measurement module ECAT ADMM 4 provides options to perform measurements with up to 10 kHz per channel at a high Ethernet bandwidth. The EtherCAT® mechanisms for time synchronization are fully supported.