



# AD8 MW2 (ADMM 8 BNC)



## Product description

AD8 MW2 measurement module features 8 analog inputs and provides very good measurement accuracy. Sensors with BNC plug can be connected directly.

AD8 MW2 is ideal for use in protected places or on test benches.

## Shipping content

- ▶ Measurement module AD8 MW2
- ▶ Configuration software CSMconfig
- ▶ Documentation
- ▶ Calibration certificate in accordance with DIN EN ISO/IEC 17025

## Key features

CAN

- ▶ 8 voltage inputs, galvanically isolated
- ▶ Measurement inputs adjustable per channel from  $\pm 100$  mV to  $\pm 60$  V
- ▶ Measurement data rate up to 2 kHz per channel
- ▶ Direct connection of sensors with BNC plug


## Maintenance

- ▶ Calibration every 12 months recommended

## Accessories

- ▶ See datasheet "CAN Accessories"

## Technical data

<b>Type designation</b>	<b>AD8 MW2</b>
	
<b>Inputs</b>	8 analog inputs
Measurement ranges	$\pm 100$ , $\pm 200$ , $\pm 500$ mV and $\pm 10$ , $\pm 20$ , $\pm 60$ V
Internal resolution	16 bit
Internal sampling rate per ch.	2 kHz
Measurement data rate / sending rate per channel	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
Input protection <sup>1)</sup>	
Operational safety	$\pm 60$ V permanent
Device safety	$\pm 100$ V permanent, additional ESD protection
<b>Gain error <sup>2)</sup></b>	
at 25 °C	max. $\pm 0.05$ % of measured value
Temperature drift	max. $\pm 10$ ppm/K
<b>Galvanic isolation <sup>3)</sup></b>	no safety isolation in terms of high-voltage applications
Channel / channel	500 V
CAN / channel	500 V
CAN / power supply	500 V
<b>CAN interface</b>	CAN 2.0B (active), High Speed (ISO 11898-2:2016) 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
<b>Power supply</b>	
Minimum	6 V DC (-10 %)
Maximum	50 V DC (+10 %)
Power consumption <sup>4)</sup>	typ. 1.3 W
<b>LED indicator (CAN)</b>	Power / status
<b>Housing</b>	aluminum, blue anodized
Protection class	IP50
Weight	approx. 500 g
Dimensions (w × h × d)	approx. 200 × 35 × 50 mm, approx. 200 × 40 × 50 mm (Slide Case)

<b>Type designation</b>	<b>AD8 MW2</b>
<b>Connectors</b>	
CAN / power supply	LEMO 0B, 5-pole, code G
Signal inputs	BNC
<b>Operating and storage conditions</b>	
Operating temperature range	-40 °C to +85 °C
Relative humidity	5 % to 95 %
Pollution degree	1
Storage temperature	-55 °C to +90 °C
<b>Conformity</b>	<b>CE</b>
<b>Part numbers</b>	ART0201042 (Standard) // ART1012601 (Slide Case)

<sup>1</sup> Observe information regarding the intended use. See CSM document “Safety Instructions MiniModule”.

<sup>2</sup> Further information can be found in the Technical Information document on the subject of “Deviation of Measurement”.

<sup>3</sup> 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. Do not connect directly to systems with higher operating voltages, e.g. high-voltage batteries of hybrid or electric vehicles.

<sup>4</sup> As of hardware revision F, the typical power consumption of previous hardware revisions is 1.6 W.

## additional products

### AD4 pro MC10

AD4 pro measurement modules cover an extremely wide range of applications. They can be used for voltage measurement, high-precision current measurement (via shunts), measurement of very low voltages (such as strain gauge based sensors measuring at mV levels), and the acquisition of higher frequency signals with measurement data rates up to 10 kHz.



### AD4 OG10

AD4 OG10 provides the means to perform measurements with measurement data rates up to 10 kHz per channel at a high Ethernet bandwidth. EtherCAT® time synchronizations are fully supported. AD4 OG10 is either operated by using an EtherCAT® master via CANopen over EtherCAT® (CoE) or by using the Ethernet/ EtherCAT® protocol converter XCP-Gateway in combination with an XCP-compatible data acquisition software.





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To product page  
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