



# μEEP 12

## High-Performance Data Acquisition and Evaluation System

### for Vehicle Testing Applications

- Parallel-synchronous data acquisition for various signals, such as CAN, analog, counter, digital, GPS (optional)
- Expandable with temperature and strain gauges (optional)
- Extended temperature range from -20°C ... +85°C available
- Online vehicle testing software

Using a combination of acquisition hardware with tablet a PC or notebook, the μEEP 12 offers a new dimension of online vehicle testing.

The housing of the μEEP 12 is designed to be identic with the new sensor generation, which guarantees a firm connection of the electronics housing with the μEEP 12 unit.

The μEEP 12 is equipped with all interfaces that modern communication requires.

The operating software sets new standards, guiding the user through his application. Various standard tests are already included in the software. The software also generates tables and customer reports.

All functions can be modified by the customer, thus allowing the creation of individualized tests.



**μEEP-12-8 (8 analog channels)**

<b>Article no.:</b>	
<b>μEEP 12-8/50 kHz</b>	<b>16685</b>
<b>μEEP 12-8/500 Hz</b>	<b>16681</b>
extended temperature range:	
<b>μEEP 12-8/50 kHz ET</b>	<b>16687</b>
<b>μEEP 12-8/500 Hz ET</b>	<b>16684</b>



**μEEP-12-16 (16 analog channels)**

<b>Article no.:</b>	
<b>μEEP 12-16/50 kHz</b>	<b>16686</b>
<b>μEEP 12-16/500 Hz</b>	<b>16682</b>
extended temperature range:	
<b>μEEP 12-16/50 kHz ET</b>	<b>16688</b>
<b>μEEP 12-16/500 Hz ET</b>	<b>16683</b>

## Typical Technical Specifications

<b>Supply</b>	Power supply 10 ... 32 V DC +5 V and +12 V available at the measurement inputs for sensor supply. Additional, small built-in UPS for absorbing voltage drops.
<b>Temperature Range</b>	Standard: -10 ... +55°C (non-condensing) Extended: -20 ... +85°C (condensing)
<b>Storage</b>	Storage via flash card up to 16 GB
<b>Analog Inputs (differential / single-ended)</b>	
Input voltage rang	±50 mV ... ±60 V adjustable
Sampling rate	up to 50 kHz per channel
Input impedance	> 1 GΩ
Linearity	< 0.05 %
Zero offset drift	2 LSB
Bandwidth	8 kHz (various filters adjustable)
<b>Counter Inputs (CNT)</b>	
Sampling rate	up to 50 kHz per channel
Input impedance	100 KΩ
Bandwidth	500 kHz max.
Level	TTL compatible
Overvoltage protection	up to ±50 V
<b>Digital Inputs</b>	
Sampling rate	10 kHz per channel
Level	TTL compatible
Overvoltage protection	up to ±50 V
<b>Digital Outputs</b>	
Output level	TTL
Max. output current	low: 15 mA / high: 0.7 A
Response time	< 100 ms
<b>CAN</b>	CAN 2.0B
<b>Dimensions (h x w x d)</b>	
μEEP 12-8 (8-channel version)	125.4 x 181.9 x 172 mm
μEEP 12-16 (16-channel version)	125.4 x 286.4 x 172 mm
<b>Weight</b>	
μEEP 12-8 (8-channel version)	approx. 3.5 Kg
μEEP 12-16 (16-channel version)	approx. 5 Kg

## Common μEEP 12 Features:

- Compact Size
- DSP Processor
- differential analog inputs, optically isolated (8 or 16, depending on device type)
- 2 x CAN-Bus
- 4 counter inputs
- 4 Switch inputs (up to 12 additional digital inputs)
- Sync connector for sensor synchronization
- Connector for 5 Hz GPS receiver (optional)
- Connector for Modem
- Storage via compact flash card
- Ethernet
- TEDS compatible
- Small UPS inside



μEEP 12 8-channel version

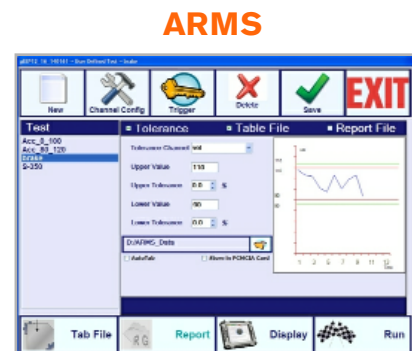


μEEP 12 16-channel version

## Online Software includes:

- Vehicle data base
- Sensor data base for easy channel configuration
- Tolerance curve
- Online calculated channels include a huge library of mathematical functions
- CeCalWin Pro menu
- Display of parameters in curve, digital, speedometer, etc.
- Table generation, user selectable
- Reports including data curves, tolerance curve, table, vehicle configuration, comments, etc.

## New Software for Vehicle Dynamics Testing



Maneuvre setup and planning, data acquisition and evaluation for driving dynamics tests. Includes 40 predefined manoeuvres.

## Temperature Module

for Extension of the μEEP 12 Data Acquisition System

- 16 Bit resolution
- Synchronous acquisition of all measurement channels
- 8 isolated temperature inputs
- Fail-safe signal transmission via internal CAN
- Power supply via μEEP 12
- Minimum wiring effort

### Typical Technical Data

Data rate:	up to 500 Hz
Thermo elements:	Type K
Measurement deviation:	$\pm 0.2$ K typ. / $< \pm 0.5$ K max.
Drift:	$\pm 0.02$ K/K $\Delta T_a$
Deviation of reference point compensation:	$< \pm 0.15$ K max.
Drift of reference point:	$\pm 0.001$ K/K $\Delta T_j$
Power consumption:	4.0 W typ. / $< 4.6$ W max. / 12 V DC
Operating temperature:	-40°C ... +85°C
Power supply:	10 ... 32 V (via μEEP 12)

## Tablet PC

for Display and Control of μEEP 12

- Tablet PC with revolvable display
- Special outdoor display with touch function
- Windows® XP (32 Bit) operating system
- Car power adapter included
- Carrying case for extended mechanical protection
- Optional solid state hard disk

### Typical Technical Data

Power / Battery:	6-cell 42W/Hr Li-Ion
Memory:	2 GB
Processor:	Intel® Core™ 2 Duo
Operating System:	Windows® XP (32 Bit)
Interfaces:	USB, 1394, WiFi, Express Card, 3D Slot, VGA, Scrollpad, RJ-45, Fingerprint Scanner
Dimensions:	25.40 x 297.18 x 218.44 mm (1.00 x 11.7 x 8.6")
Weight:	Starting 1.61kg (3.57lbs) with 4-cell battery (weights will vary depending on configurations and manufacturing variability.)

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### μEEP 12 Temperature Module

Article no.:  
μEEP12  
Temp. Module 16832



### Tablet PC

Article no.:  
Tablet PC 16689

In a continuous effort to improve our products, CORRSYS-DATRON reserves the right to change specifications without prior notice.

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