# Electronics & Software



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# DAS-3

Type CDAS3A

## Data Acquisition and Evaluation

Designed for vehicle dynamics measurement using Correvit® sensors.

- Quick and easy mounting of the complete measurement system in the vehicle
- Online display of up to 3 measured variables and 5 measurement values upon completion of the measurement
- Optional LED display with large, easy-to-read values – displays up to 3 user-selectable measurement values
- All channels can be used as triggers
- Internal storage of up to 8 GByte of measurement data
- Supply voltage for active sensors via DAS-3

### Description

A DAS-3 system consist of a base data acquisition module, and a control and display unit. The base module incorporates two primary components: an acquisition module and a processor module. The base module also includes Ethernet, USB, COM and connections for additional displays.

This new design enables simple, cost-effective expansion of the unit's functionality. Optional extension modules can be easily connected to the base module.

Operation, parameterization and online data display are achieved via the proven DAS control and display unit. System parameters also can be set up using a connected PC running CeCalWin Pro Software.

### Application

The DAS-3 ultra-compact, in-vehicle data acquisition and evaluation systems represent the next logical step in the evolution of the proven DAS-2A data acquisition system, and are optimized for these and other vehicle dynamics testing applications:

- Braking distance measurement
- Acceleration measurement
- Coast-Down-Test
- Fuel consumption measurement
- Determination of $v_{max}$

## Technical Data

### Channels

| | | |
|---|---|---|
| Input channels for Correvit sensors | no. | 1 TTL |
| Frequency channels[1] | no. | 6 |
|    Frequency limit min. | kHz | 100 |
|    Level | | TTL |
|    Overvoltage Protection | | yes |
| Analog channels | no. | 8/16 |
|    Resolution | Bit | 16 |
|    Input voltage range | V | –10 ... 10 |
|    Adjustable gain factors | | 1, 2, 4, 8 |
| Sampling rate per channel max. | kHz | 1 |
| Switch inputs, galvanically isolated | no. | 2 |
| Input voltage max. | V | 24 |

### Interfaces

| | | | |
|---|---|---|---|
| CAN | | | 2.0B |
|    Baud rate | from | KBd | 5 |
| | to | MBd | 1 |
| USB (Full Speed) | | | 2.0 |
| Ethernet | | | yes |
| RS-232C | | | yes |

### Storage

| | | |
|---|---|---|
| Compact Flash memory card, max. | GB | 8 |

[1] Switchable between frequency measurement, counter, cycle duration measurement, pulse duration – extendable with optional modules

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### Technical Data (Continuation)

**System Specifications**

| Power supply[2] | V | 9 ... 26 |
|---|---|---|
| Power consumption at 12 V | W | 12 |
| Temperature range | | |
|     Operation | °C | –20 ... 50 |
|     Storage | °C | –20 ... 70 |
| Protection standard (min.) | | IP20 |
| Dimensions base module (WxHxD) approx. | mm | 300x230x150 |
| Weight of complete system, approx. | kg | 4,4 |

[2] available at the measurement inputs for the sensor supply; additional small built-in UPS to intercept voltage drops



Fig. 1: DAS-3 with control/display unit

### Included Accessories — Type/Art. No.

| | |
|---|---|
| • DAS control/display unit | KCD10090 |
| • Sensor connection cable | KCD16357 |
| • Power cable | KCD10398 |
| • CAN cable | KCD12993 |
| • RS-232C cable | KCD10378 |
| • USB cable | KCD13947 |
| • Connection cable | KCD15794 |
| • Connection cable BNC | KCD10521 |
| • Display signal cable | KCD13074 |
| • Adapter BNC Lemo 6 pin, 2 x | KCD10001 |
| • Adapter BNC D-Sub | KCD10003 |
| • Light barrier adapter | KCD12680 |
| • Brake switch adapter | KCD13021 |
| • Card reader | KCD15414 |
| • CF card 8.0 GB | KCD17145 |
| • Multimedia CD | KCD11343 |
| • Transport case, complete | KCD17359 |

### Optional Accessories — Type/Art. No.

| | |
|---|---|
| • Extension module 8 analog, 8 counter | KCD15467 |
| • Extension module 16 analog, 8 counter | KCD15416 |
| • Extension module temperature, 16 channel | KCD15421 |
| • Printer | KCD15419 |
| • Light barrier including mount | KCD11356 |
| • Brake switch, cable = 3 m | KCD11200 |

Further Accessories (e.g. thermo sensors) on request

### Ordering Code

| | |
|---|---|
| • DAS-3 Data Acquisition and Evaluation | **Type CDAS3A** |