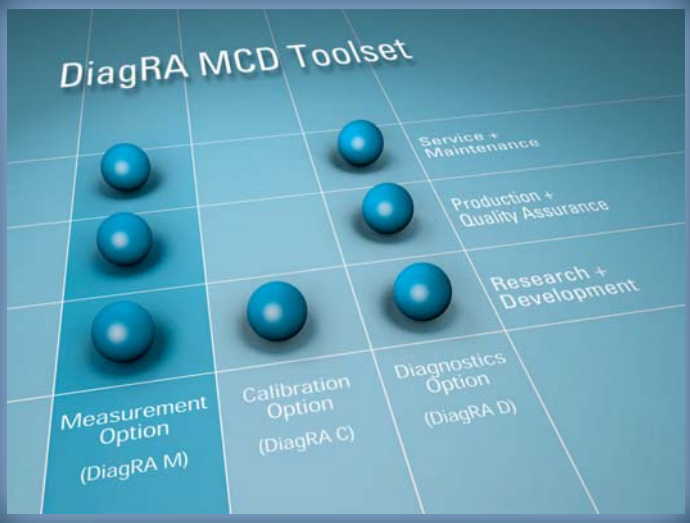
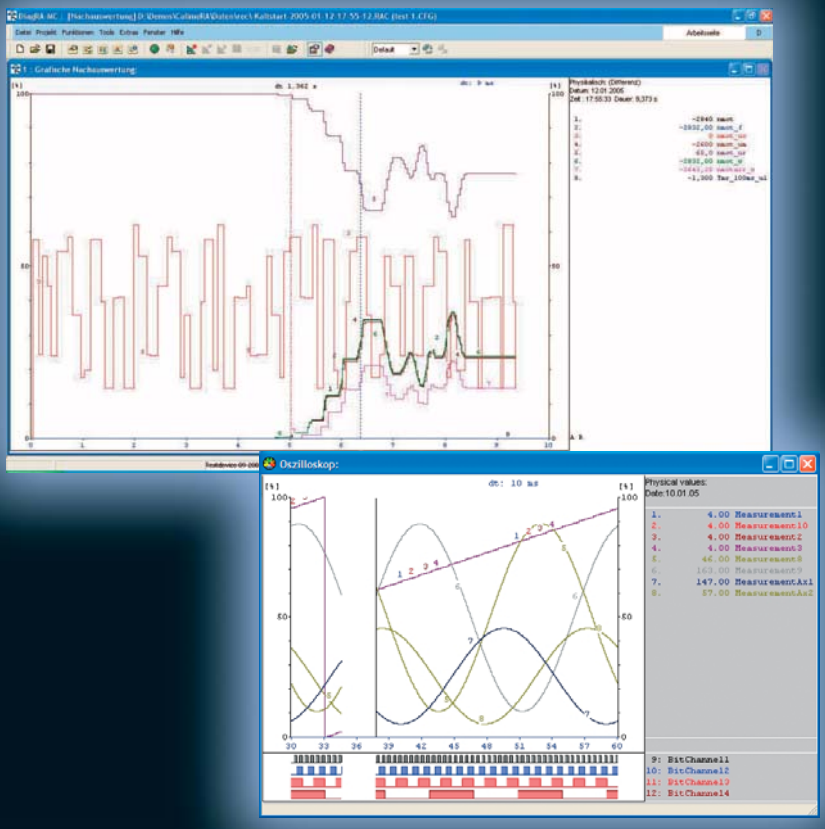
New

# DiagRA M

## Measurement option from the DiagRA MCD Toolset




**The features:**

- Acquisition of measurement values
- Support of measurement devices on SMB and CAN
- Graphical and numerical display of measurement values
- CAN messages can be transmitted
- Acquisition of measurement values from ECUs by use of an ECU description file (A2L)
- Extensive data processing and analyzing functions
- Online measurement
- Standards: CANdb, MDF, MCD-2-MC, CCP

**Your benefit:**

- Powerful, flexible, adaptable and storable user interface
- Minimum hardware requirements
- Clarity, intuitive operation
- Fast and simple configuration
- Interaction with DiagRA C and DiagRA D for calibration and diagnostics

**DiagRA MCD Toolset**

The DiagRA MCD Toolset is an applications and diagnostics tool for working with electronic control units in the automotive industry. It consists of the three integrated options DiagRA M, DiagRA C and DiagRA D. All three options can also be run separately.

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# Measurement with DiagRA M

## The measurement option from DiagRA MCD Toolset

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With **DiagRA M** you can acquire online the state variables for a vehicle from electronic control units and from measurement devices and display them both graphically and numerically. The data can be directly processed by the integrated analysing functions.
The emphasis here is on simple, fast and intuitive operation as well as a functionality which is exactly tailored to the needs of the mobile applications engineer.
The acquisition of measurement values is carried out on the CAN and, if needed, simultaneously on the serial measuring bus (SMB). For the definition of the acquisition parameters, CAN DBC files or corresponding control unit description files (A2L) are needed. The parser for the interpretation of the control unit descriptive files is designed according to the ASAM MCD-2-MC specification.
Furthermore diagnostic values from Scan-Tool Mode 1 and physical values from the measurement value blocks can be accessed by using the diagnostics option **DiagRA D**. The values can be displayed both graphically and numerically, recorded and processed. The triggers of **DiagRA M** can use these values.
Together with the other options from the **DiagRA MCD Toolset** a complex, but cost efficient applications environment can be assembled.

Features

1. Low cost

- Minimum hardware requirements
- Use of existing hardware
- Simple installation
- Minimum familiarization time
- Minimum build up times
- Fast and simple configuration
- Data transfer to and from existing applications systems

2. Mobility

- Single hand operation
- Notebook as measurement computer
- If requested wireless communication with the ECU via Bluetooth device (e.g. Blue XS/I+ME Actia, CANblue/IXXAT, Siemens Blue VCI)
- Task suitability
- Demand-oriented functionality by modularization
- Clarity
- Intuitive operation
- Configurable user interface
- Flexible window handling
- Fast adaptation of user interface and configuration
- The configuration can be stored – hence the functional sequences can be repeated and compared
- Graphical and numerical display of measured values
- Easy-to-use, storable triggers with conditions which can be combined over several measurement channels

3. Functionality

- Online measurement
- Offline processing of data sets
- Control unit version administration (conversion of measurement configurations, compatibility testing)
- Sending of CAN frames
- Editable channel configuration in measurement mode
- Possibility to define own labels → It is now possible to record measurement data that are not described into the A2L file
- Support for cold start function of the control units, i.e. a measurement is first prepared for cold start measurement in the control unit, in order to then be able to be carried out spontaneously at „ignition on“ without preparation time.
- Measuring cursor can be synchronized in various measuring windows in off-line mode
- Possibility to use simply editable CSV files to execute time controlled operations like a script→ in combination with **DiagRA C** calibration operations can be executed simultaneously with measurements

4. Standards

- CCP conformity
- XCP conformity – as soon as the control devices support this
- Supports CANdb
- Supports measuring devices for SMB and CAN
- MDF for data transfer
- Network-capability via TCP/IP
- MCD-2 conformity

5. Hardware support for CAN interface devices

- PassThru interface devices according to SAE J2534; already tested: I+ME Basic XS, I+ME PassTru+XS, Dearborn Python and Gryphon
- CAN interface devices from IXXAT GmbH
- MCS4 from Kleinknecht
- CANcard XL (Vector)/CAN-Link II (ETAS)

6. System requirements

- Windows NT/2000/XP
- Possibility to connect the used interface hardware

The use of **DiagRA M** is only possible with a special software license key, generated by RA Consulting.



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October 19th, 2005