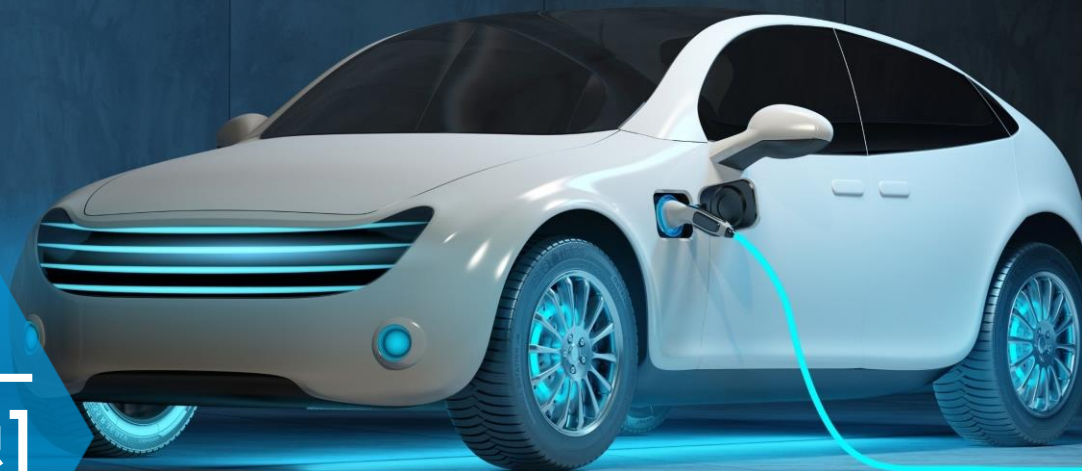


THE MEASURABLE DIFFERENCE.



DEWETRON



▼
NEX[DAQ]

COMPACT & ROBUST DAQ SYSTEM FOR AUTOMOTIVE APPLICATIONS

distributed by
CALTEST
INSTRUMENTS
Binzigstraße 21 | Tel.: +49 7842 99722-0
D-77876 Kappelrodeck | Fax: +49 7842 99722-29
www.caltest.de | info@caltest.de

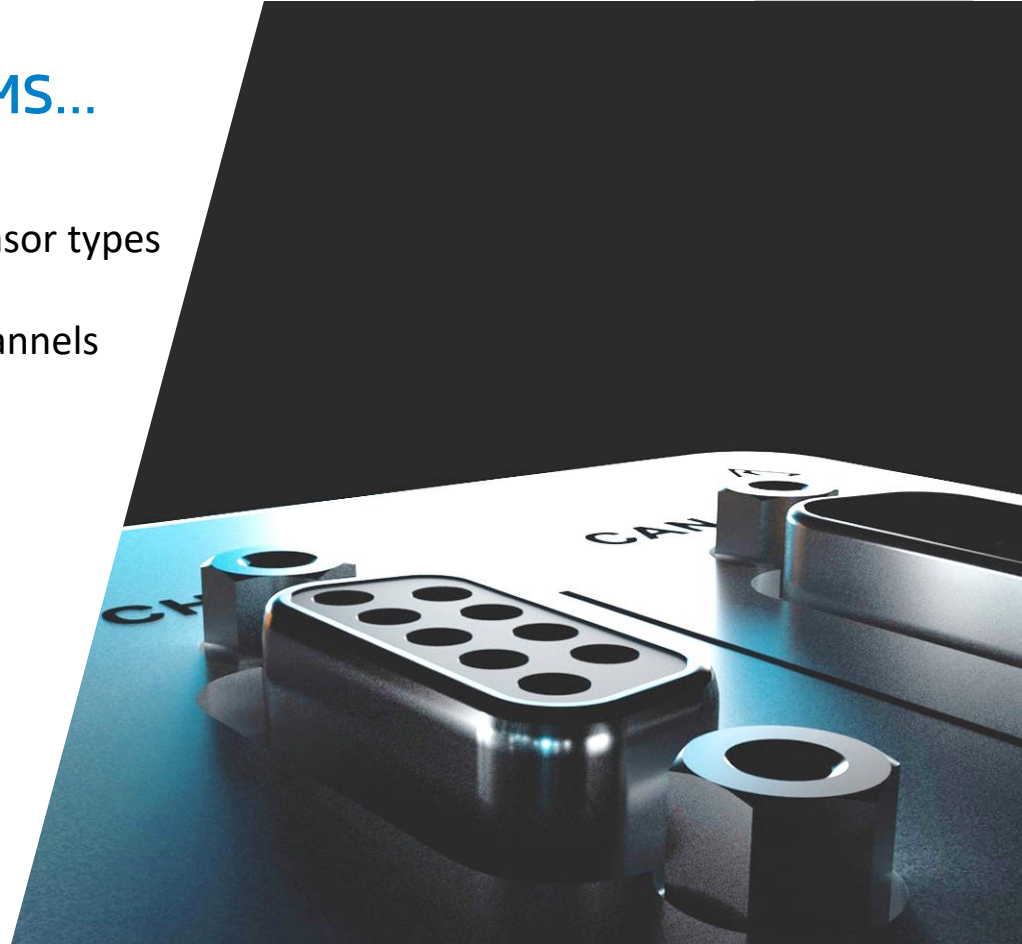
Picture credits: © stock.adobe.com & © DEWETRON

DO YOU KNOW THESE PROBLEMS?



COMMON MEASUREMENT SYSTEMS...

- ... often only support one or few dedicated sensor types
- ... do not provide enough or the right input channels
- ... are not made for harsh environments
- ... are difficult to supply in a vehicle
- ... are often bulky and heavy
- ... do not offer CAN-FD



SOLUTION



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NEX[DAQ]

HOW CAN THE NEX[DAQ] HELP YOU?



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DRIVE MODULE:

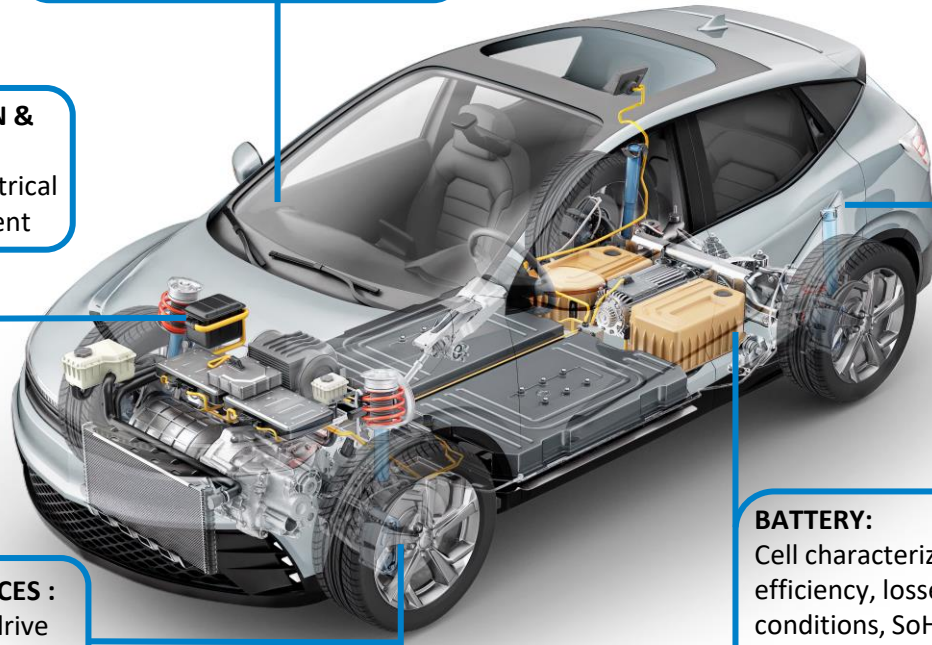
Electrical and mechanical power of the drive train of BEV and HEV, speed, rotation, acceleration, NVH

CONDUCTIVE & INDUCTIVE CHARGING:

Analysis of the charging process and charging infrastructure, efficiency, energy loss, power, charging efficiency, flow rate, electro-magnetic compatibility (EMC) with charging stations (harmonics), load profile & charging duration.

ELECTRIC MOTOR, TRANSMISSION & POWER ELECTRONICS:

NVH, efficiency, temperature, electrical and mechanical power measurement



DRIVE TRAIN & WHEEL FORCES :

force measurement on the drive shafts (also during different driving situations), pressure

BATTERY:

Cell characterization, charge-discharge cycles, efficiency, losses, life tests under different conditions, SoH conditions, SoH, End-of-Line, electrical power, temperature, range test, powertrain, electrical components, etc.



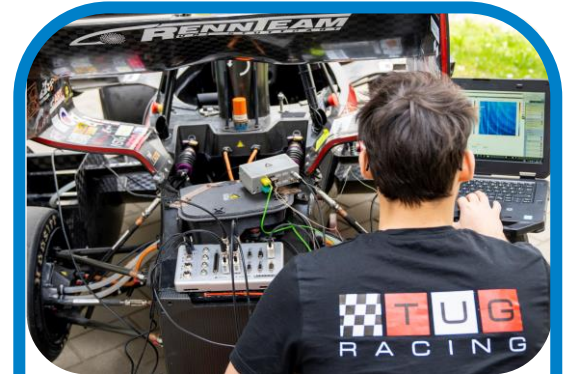
WLTP TESTS

The NEX[DAQ] together with a MS12-V-600 and current clamps work is the ideal solution for driving range testing. Additional data sources like the vehicle CAN(-FD) bus and a GPS signal can be acquired for verification.



DRIVING COMFORT TEST

A lot of effort is invested in the passengers driving comfort as they shall enjoy the ride and want to feel safe. The NEX[DAQ]'s 8 input channels can be used for connecting i.e., 2 triaxial accelerometers for measuring the acceleration affecting the passengers and in addition 2 microphones to measure interior and exterior noise.



COMPONENT TESTING

The NEX[DAQ] can be used to monitor low voltage signals and for example the status of solenoid valves. Even Order Analysis is easy to accomplish when using the NEX[DAQ].



THERMAL MANAGEMENT TEST:

With our NEX[DAQ] and our XR modules, thermal management tests are an easy task.



TROUBLE SHOOTING:

The NEX[DAQ] is compact, robust and lightweight. It easily fits in every case and that makes it your ideal travel buddy. It simply is the must-have for every test and measurement engineer.



SIMPLE NVH TEST:

Microphones and accelerometers can be connected for air- and structure borne noise related tests. As the NEX[DAQ] is fanless it can be put close to the DUT to minimize the cable lengths.

THUS THE NEX[DAQ] IS

the ideal DAQ system...

- > to identify the cause of problems - especially when you need several sensors like:
 - > Accelerometer
 - > Microphone
 - > Speed and angle sensors
 - > Or signals via CAN or CAN-FD

- > with multiple power supply options:
 - > Power-over-Ethernet oder USB-C
 - > or powered by the vehicle supply or a power bank

- > for low-channel-count measurements with per channel sample rate capability up to 1 MS/s



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NEX[DAQ] – the ideal DAQ system because ...



you can take it everywhere with you

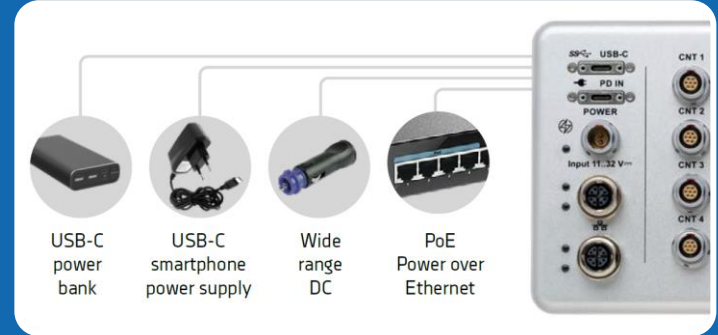


1250 g
2.76 lbs



242 x 120 x 43.3 mm
9.52 x 4.72 x 1.7 in

COMPACT & PORTABLE



MULTIPLE POWER SUPPLY OPTIONS



IP67 RATING



FANLESS



-20 °C TO +70 °C

NEX[DAQ] – the ideal DAQ system because ...

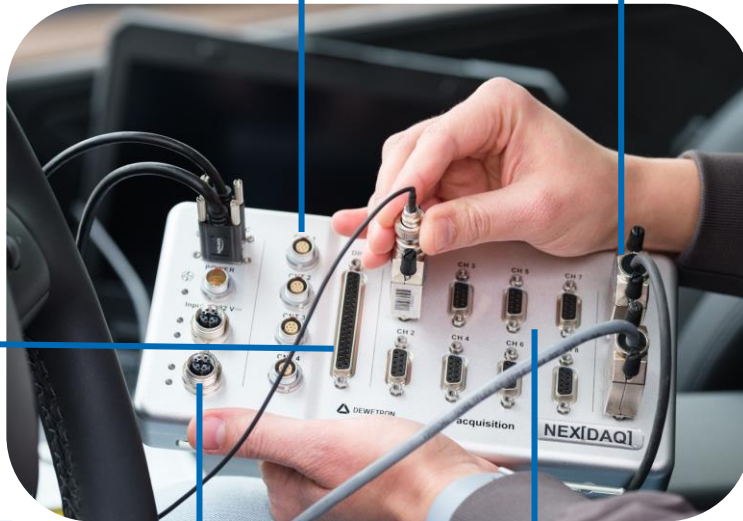


4 ADVANCED COUNTER
(e.g. for encoder)

8 DI + 4 DO
8 COUNTER

SYNCHRONIZATION via
Ethernet, PTP, IEEE1588

ETHERNET or USB-C
CONNECTION
to PC for data transfer



2 interfaces for CAN-FD and XR-module connection



XR modules for low-speed channel expansion, e.g. for many temperature channels.

UNIVERSAL ANALOG INPUT CHANNELS
(native direct inputs + additional via MSI)

NATIVE INPUTS



VOLTAGE



BRIDGE



CAN-BUS



DIGITAL I/O



COUNTER

ADDITIONAL INPUT SIGNALS: Every common analog sensor is supported with DEWETRON's MSI sensor adapters



VOLTAGE



CURRENT



LVDT



THERMO-COUPLE



POTENTIO-METER



RTD



CHARGE



VIBRATION

NEX[DAQ] – the ideal DAQ system because ...

it is versatile



MOUNTING OPTIONS

You can fix the NEX[DAQ] in the measurement environment in several ways like with belt, DIN rail or screws.



EXPANDABLE

Dasychain multiple NEX[DAQ]s to a multi-channel-system. A single cable is sufficient for data transfer and synchronization via Ethernet PTP/IEEE1588.

NEX[DAQ] – the ideal DAQ system because ...

it already comes with OXYGEN

OXYGEN is our intuitive & easy-to-use measurement software

Standard Software Features:

- > Analysis & post-processing
- > Visualization
- > Math & calculation
- > Trigger features
- > FFT analysis
- > Export features
- > Reporting
- > ... many more features available!



NEX[DAQ] & OXYGEN



DEWETRON

OXYGEN runs without restrictions on **Windows** and **Linux** based operating systems.

The Linux distributions Red Hat Enterprise Linux 8 (RHEL8) and Ubuntu are supported.



ABOUT DEWETRON



Founded in 1989



Head Office in Grambach (AT)



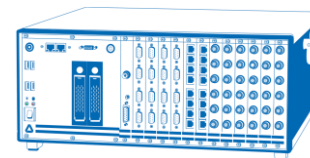
Subsidiaries in DE, USA, CN & IN



Since 2016 part of the TKH group



120 employees in more than 25 countries



> 25.000
measurement systems



> 400.000
measurement channels