DEWETRON

IP67

-20 °C TO +70 °C

FANLESS

NEX[DAQ]

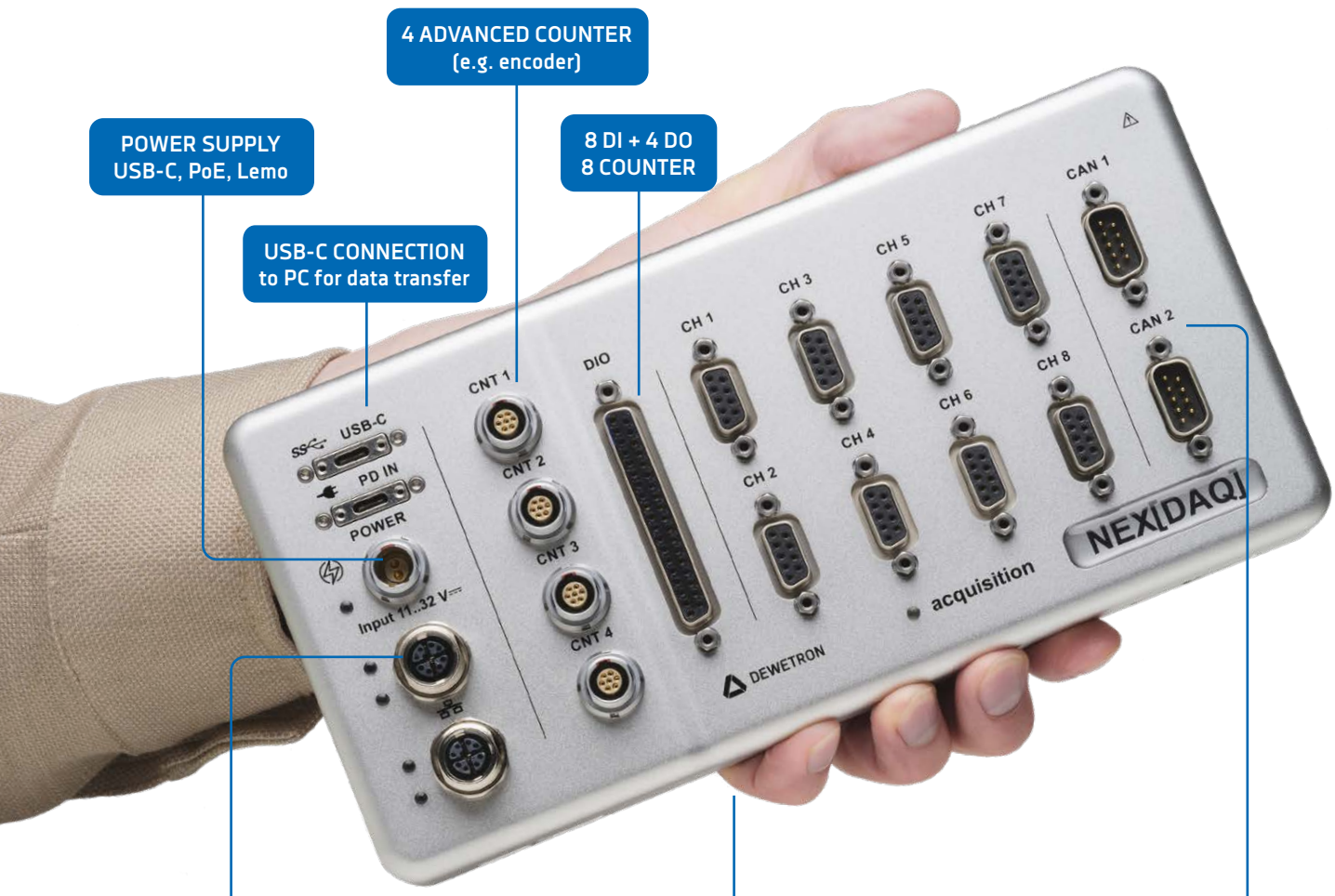
SMALL BUT POWERFUL

NEX[DAQ]

RUGGED USB & ETHERNET DATA ACQUISITION SYSTEM

NEX[DAQ] is the flexible "everyday tool" for all test and validation engineers and troubleshooters. Small, compact and very rugged: the 8-channel NEX[DAQ] with analog, universal inputs and a great price-performance ratio.

When connected to the USB-C or Ethernet interface of any computer, the NEX[DAQ] becomes a powerful measurement system for analog, digital, counter and CAN-bus data acquisition.



SYNCHRONIZATION via Ethernet, PTP/IEEE1588

ETHERNET CONNECTION to PC for data transfer

Via a LAN connection it is easy to place the NEX[DAQ] close to the sensors while you and your measurement laptop are situated in a clean environment up to 100 meters away.

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 sensor is supported with DEWETRON's MSI sensor adapters.

VOLTAGE · CURRENT · LVDT

THERMO-COUPLE · POTENTIO-METER · RTD · CHARGE · VIBRATION

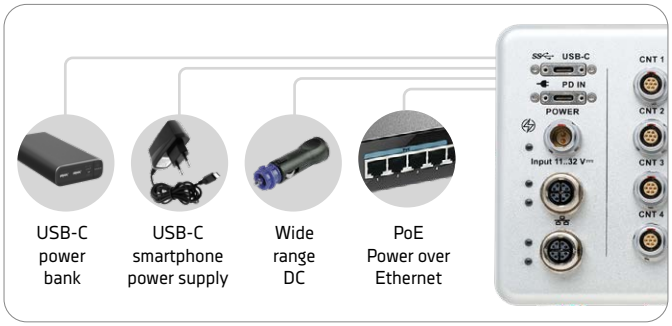
2 interfaces for CAN-FD and XR-MODULE connection

XR modules for low-speed channel expansions, e.g. for many temperature channels or RTD inputs

POWER SUPPLY OPTIONS

The NEX[DAQ] offers multiple power options for easy and worry-free use in any situation:

> Via USB-C PD connector:
  > For any simple power adapter with a USB-C connector
  > For the use of a standard smartphone power bank
> Via Lemo socket for wide range DC input, enables to connect to vehicles board grid (12 V, 24 V)
> Via Power over Ethernet using PoE injector or PoE switch



HIGHER CHANNEL COUNTS

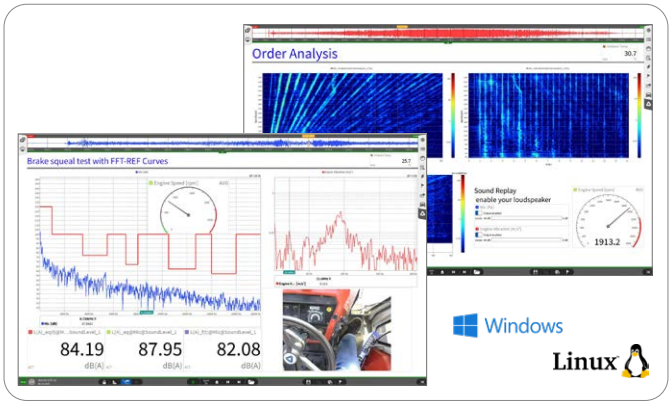
The NEX[DAQ] data acquisition system is distributable. If 8 channels are not enough, multiple NEX[DAQ] units can be daisy-chained to a multi-channel system at any time. A single cable is sufficient for data transfer and synchronization via Ethernet PTP/IEEE1588.

No matter if one NEX[DAQ] or several, due to its small size and weight, the NEX[DAQ] is the ideal travel companion for engineers who need to make a quick plane ride to the job site. It fits easily into any pocket and can be taken along with your laptop. This makes it ideal for trouble-shooting, maintenance or commissioning of equipment, such as test benaches or machines and many more.

SOFTWARE OXYGEN

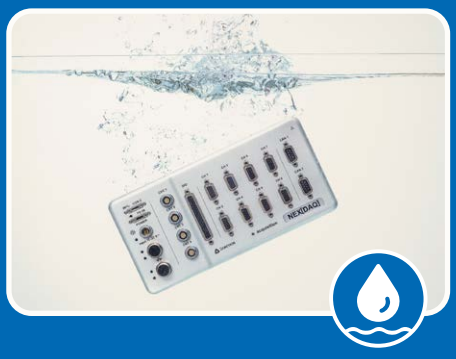
Our measurement software OXYGEN ensures easy and quick setup of the NEX[DAQ]. Just plug & play to start the gapless data recording. Customize the software according to your measurement tasks by defining different screens and views.

OXYGEN is perfectly suited for simple data recording with a clear visualization of all data and enables meaningful reports (e.g. as PDF) to be created in record time. Monitoring applications are supported by trig-gered recordings and multi-file storage. For demanding measurements, OXYGEN offers enhanced features like powerful math-functions, FFT analysis, order analysis, swept sine analysis, power analysis, etc.



READY FOR ALL ENVIRONMENTAL CONDITIONS

HOT, COLD, WET, DUSTY, DIRTY



WATERPROOF

The NEX[DAQ] is not only reliable, but ab-solutely rugged. Even water will not harm it. Therefore, it has an IP67 rating, that indicateds it is dust and waterproof over extended time.

FANLESS

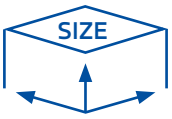
Since the NEX[DAQ] does not have a fan, it is noiseless and therefore suitable for acoustic measurements. IEPE microphones are supported via MSI sensor adapters

-20 °C TO +70 °C

With its extended operating temperature range of -20 °C to +70 °C the NEX[DAQ] is ready for use in climate chambers, close to hot components and outdoor testing.

APPLICATION EXAMPLES

> Maintenance, service and troubleshooting
> Distributed measurements with few channels at each node
> NVH/sound testing
> Thermal management testing of e-vehicles
> Vehicle power consumption road test
> Aero engine field trouble shooting
> Material strength testing with strain gauges
> Machinery diagnostics (e.g. Order Analysis)



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

1250 g
2.76 lbs

NEX[DAQ]	
Analog input	8 inputs for voltage up to ±100 V and full/half bridge, TEDS and MSI support
Further input types, via MSI sensor adapter	IEPE, quarter bridge, charge, RTD, LVDT, thermocouple, 0 to 20 mA, voltage up to ±1000 V
Sampling rate	24-bit, 200 kS/s or 1 MS/s per channel
Accuracy	±0.05 % of reading, ±0.02 % of range ±50 µV
Hardware filter	Butterworth and Bessel, 2nd, 4th, 6th or 8th order
Sensor excitation	1 V to 24 V, freely programmable
Counters, digital I/O	4 advanced counters and 8 basic counters/digital inputs, 4 digital outputs
CAN-bus	2 interfaces for CAN2.0 and CAN-FD
Interface to host PC	USB-C or Ethernet
Power supply	9 to 36 V
Power supply buffer	Buffered for 0.5 s in case of a voltage drop
Synchronization	Via Ethernet PTP/IEEE1588
Topology	Dasychain, Star

ABOUT DEWETRON

DEWETRON is a manufacturer of precision test & measurement systems designed to help our customers make the world more predictable, efficient and safe. Our strengths lie in customized solutions that are immediately ready for use while also being quickly adaptable to the changing needs of the test environment and sophisticated technology of the energy, automotive, transportation and aerospace industries.

More than 30 years of experience and innovation have awarded DEWETRON the trust and respect of the global market. There are more than 25,000 DEWETRON measurement systems and over 400,000 measurement channels in use in well-known companies worldwide.

DEWETRON employs over 120 people in 25 countries and is part of the TKH Group, a global corporation, that specializes in the development and supply of innovative solutions worldwide.

DEWETRON's quality is certified in compliance with ISO9001 and ISO14001. The high integrity of the measurement data is guaranteed by our own accredited calibration lab according to ISO17025.

Get to know our
GLOBAL OFFICES

THE MEASURABLE DIFFERENCE.

DEWETRON

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