



DEWESoft®

PRODUCT OVERVIEW



V26-1



DEWESoft

YEAR WARRANTY

DESIGNING TEST EQUIPMENT THAT SIMPLIFIES THE ADVANCEMENT OF HUMANITY.

WE ARE ON A MISSION TO REVOLUTIONIZE THE MEASUREMENT INDUSTRY BY DEVELOPING INNOVATIVE SOLUTIONS THAT ARE TAILORED TO OUR CUSTOMERS NEEDS.

"We recommend SIRIUS as a great unit to anyone that asks how we like it." - **SPACE X**

"I have never encountered a company as competent as yours. Respect! You will always be encouraged and supported by me." - **BRIDGESTONE**

"I wanted to personally write to you and tell you how impressed I am with Dewesoft products. The whole Dewesoft team impressed me as extremely happy, smart, and dedicated." - **IRISENSORS**

"We absolutely enjoy using the Dewesoft data acquisition equipment and its software. I think of it as the Porsche 911 of data acquisition (my dream car/our dream test equipment)." - **AGI**

"I think I mentioned in previous emails how Dewesoft has mushroomed here, but even I didn't know how much. I was informed today that the data was being reviewed by up to 50 to 60 different centers, along with NASA personnel as high as the manager of the entire Space Shuttle program." - **NASA KSC**

"It has been a long day, but before going home I wanted to say a few things. Thank you from the bottom of my engineer heart and in the name of OneSubsea for what you did today! Yesterday at 10 PM I sent you an email asking for urgent help on a Saturday morning. 30 minutes later you replied you would come. This morning you were 5 people involved in resolving the issue. I have never experienced such customer service! Thanks again, customer service matters a lot to us, and today's response blew me away." - **OneSubsea**

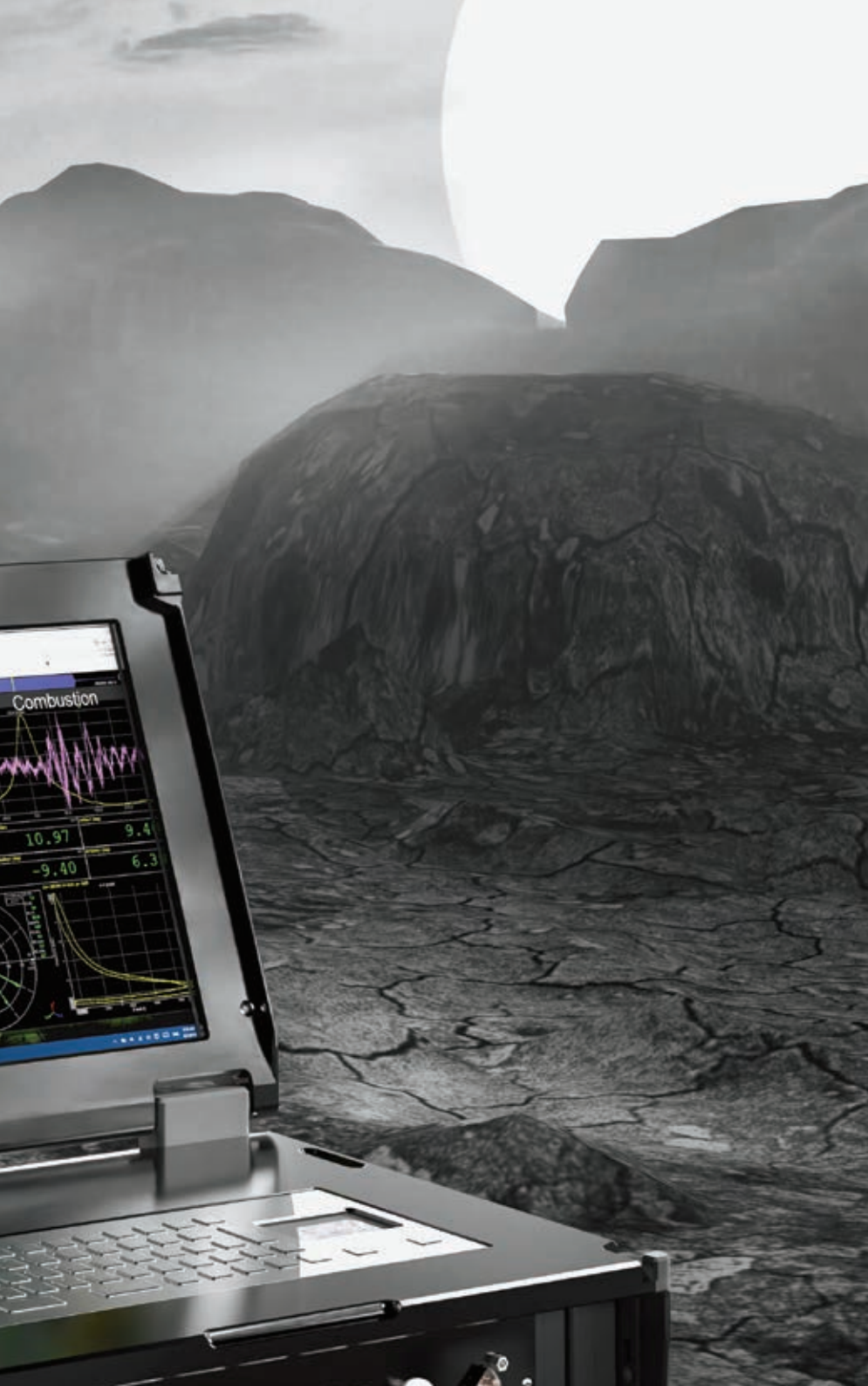
"Again, thanks for all the efforts on this project! I greatly appreciate everything you guys have provided to us." - **BAYER**

"The setup and measurement process in the FRF module is really fascinating. Among the systems that I have seen, it is the absolutely most straight forward. Geometry and the measurement setup are available as files. It's a matter of minutes to have the final FRF's and the animation to get an impression of the vibrations. That's great!" - **IABG**









EASY TO USE

DATA ACQUISITION INSTRUMENTS.

We design and manufacture versatile and robust data acquisition systems that make test and measurement easier than riding a bike. Our instruments are designed to be easy and fun to use, modular and extendable, and can work with any signal and sensor. Dewesoft instruments are built to be robust and can be used in every environment. By investing in our data acquisition solutions you invest in your time and your future.

Are you ready to test and measure?

DEWESOFT 7-YEAR WARRANTY

Our warranty covers that the instruments function as promised for a period of 7 years from the day of the delivery.

MODULAR AND EXPANDABLE

Systems can be gradually expanded from one to thousands of channels for any measurement challenge.

AWARD WINNING DEWESOFTX

One software for all measurement applications. Fast learning curve, no programming needed.

TOTAL SOLUTION

Dewesoft hardware and software forms a total solution for all test and measurement applications.

DEEP IN FUNCTIONALITY

Used in the most advanced research labs around the world.

PLUG AND PLAY

Any device, sensor or signal.

FULLY SYNCHRONIZED

Data from various sources are perfectly aligned. Analog, Digital, Counter, vehicle buses, Video, ...

VERSATILE AND EASY TO USE

Get your measurements in 30 seconds.

NO HIDDEN COSTS

Free lifetime software upgrades, no maintenance fees, free online training courses.

SIRIUS® HIGH-END DAQ SYSTEMS

SIRIUS® MODULAR

Most flexible and distributable single slices with USB and EtherCAT® interface.



SIRIUS® SBOX

Synchronized, highly reliable data logger and powerful data processing computer.



SIRIUS® XHS

High-speed data acquisition system (15 MS/s) with the Hybrid ADC technology capable of high bandwidth transient recording and very high dynamic, alias-free data acquisition.



SIRIUS® X

New generation high-channel distributable DAQ system with Gigabit LAN and PTPv2 synchronization.



ANALOG OUTPUTS

SIRIUS slices can be configured with 8 analog outputs and function as a multi-channel function generator, can also do real-time signal conditioning, analog replay of data in analysis, and perform manual or automated control output with output voltage levels of up to +/- 10 V.

HYBRID ADC TECHNOLOGY

SIRIUS XHS offers everything you ever wanted out of a high-end data acquisition system. High bandwidth and high dynamic mode available in parallel, software selectable per channel.

ISOLATED CAN-FD AND CAN BUS INTERFACE

High-speed CAN-FD channels with up to 8 Mbit/s and CAN 2.0b with 1 Mbit/s data throughput with additional support for CCP, OBDII, J1939, and CAN output.

Our data acquisition systems are versatile, modular, easy to use and can work with any sensor with the highest precision imaginable. Input channel configurations are flexible and the input channel count can vary from 1 to 1000s of channels. Our measurement systems are flexible and can grow with you at any time in your measurement process.



SIRIUS® R8DB/R8rt

Integrated instrument with 8 SIRIUS slices, powerful SBOX computer, optional 19" display (R8D) and batteries (R8DB) and real-time EtherCAT® slave interface (R8rt).



SIRIUS® R4/R4rt/R4-HUB

Integrated solution with 4 SIRIUS slices and powerful SBOX computer or USB hub in one unit with real-time EtherCAT® slave interface.



SIRIUS® R1DB/R2DB

Small-size instrument with embedded computer, 12" display and batteries.



SIRIUS® R3

Up to 3 SIRIUS slices in a rack mounted lab unit with standard easy-to-upgrade computer.



HIGH ISOLATION

High channel-channel and channel-ground isolation prevents ground loops and damage to the system from excessive voltage.

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SENSOR POWER SUPPLY

Amplifiers provide channel-independent, programmable power supply for sensor excitation.

UNIVERSAL ANALOG INPUTS

A wide variety of universal and analog amplifiers that accept voltage and full/half/quarter bridge signals natively as well charge and IEPE accelerometers, thermocouple and RTD temperature sensors, current, resistance, and even LVDT sensors, with the use of DSI adapters.

DIGITAL/COUNTER/ENCODER INPUTS

Each counter channel is capable of 3x digital inputs, 1x event counter, encoder, period, pulse-width, duty-cycle, and precise frequency and angle measurement using patented SuperCounter® technology.

IOLITE® AND OBSIDIAN® DAQ AND CONTROL DEVICES

REMOTE OVERVIEW

On device status LED lights or connection to DewesoftX software, DewesoftM mobile app or any openDAQ client provides an easy overview of health and status of the device.

STAND-ALONE DATA RECORDER

The OBSIDIAN® system autonomously records analog, digital, positional, CAN, and calculated data from almost any source. Data can be stored on internal memory, SDHC cards up to 1 TB, or USB-C drives. It supports the Chapter 10 format for local storage and real-time telemetry streaming, meeting aerospace standards.

OBSIDIAN® R8/R8w

Embedded data acquisition system based on a low power ARM processor with Linux-based open architecture. OBSIDIAN device can act as a standalone data logger, real-time control system, and signal conditioning front-end - all at the same time.

IOLITE® R8/R8r

SIRIUS form chassis with up to eight slots, dual EtherCAT® interface and redundant power supply - also available in rugged chassis.

IOLITE® / OBSIDIAN® R12

19" rack version with up to twelve slots. Great for higher channel count applications. Can be configured as IOLITE or OBSIDIAN system..



REDUNDANT POWER SUPPLY

Together with dual EtherCAT® interface provides maximum system reliability.

GREAT SIGNAL CONDITIONING

High-quality IOLITE amplifiers compatible with IOLITE or OBSIDIAN device, offer great signal quality and up to 40 kS/s sampling rate. *Max. 20 kS/s in OBSIDIAN.

DUAL EtherCAT®

IOLITE and OBSIDIAN devices use two EtherCAT® buses in parallel. The EtherCAT® primary bus is used for full speed buffered data acquisition to a computer. The EtherCAT® secondary bus is mainly used for real-time data to any 3rd party control system.

DEWESOFTM

Powerful, mobile data acquisition system for fast, accurate measurements in the field, combining high sample rates, flexible I/O, and easy setup in a compact, rugged design.



Our data acquisition devices are capable of storing hundreds of analog and digital channels at full speed while allowing parallel data to be sent out in real-time to any 3rd party EtherCAT® master controller. We have brought the worlds of data acquisition and real-time control closer together - this will save you time and money in a big way.

IOLITE®

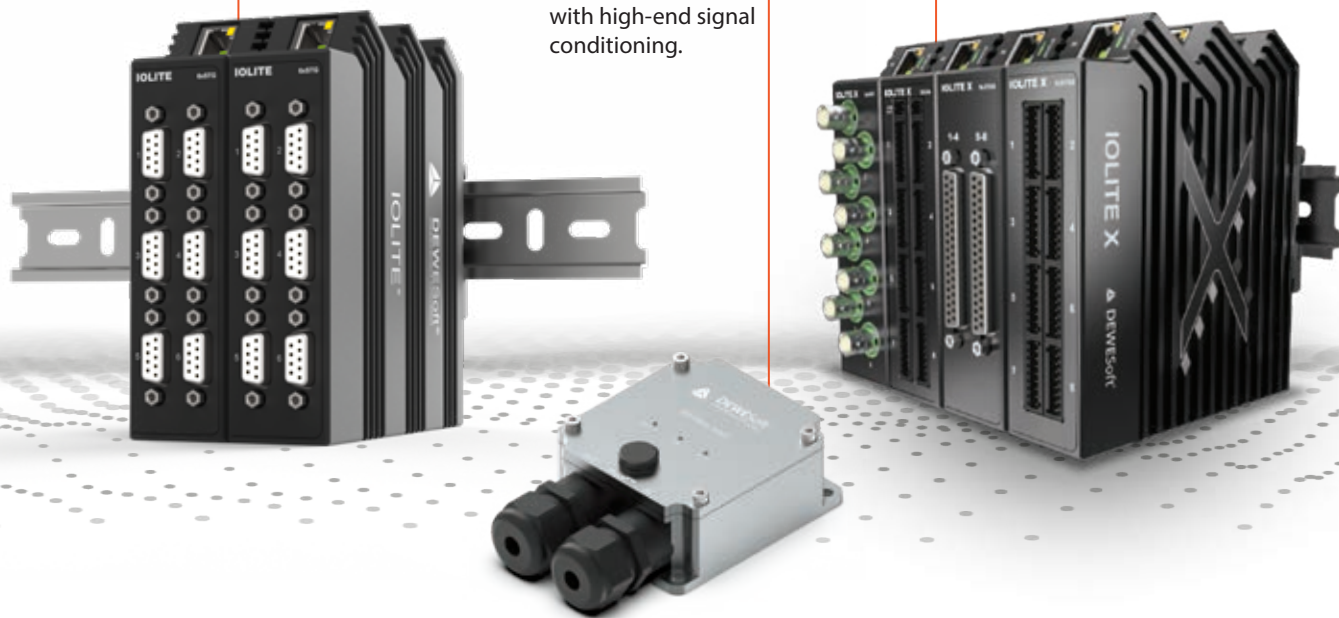
Standalone, distributed, and cost-effective data acquisition device with high-end signal conditioning for monitoring and industrial applications.

IOLITE® ONE

Distributed, cost-effective single channel data acquisition device with high-end signal conditioning.

IOLITE® X

Next-generation, distributable data acquisition system offering up to 200 kS/s at 24-bit resolution, GLAN with PTP and active PoE, and open integration via the openDAQ SDK.

**GREAT PRICE/PERFORMANCE**

IOLITE and OBSIDIAN offer great price/performance ratio and is suitable for test-bed and industrial applications.

7-YEAR WARRANTY

Our warranty covers that the instruments function as promised for a period of 7 years from the day of the delivery.

TEMPERATURE RANGE

While IOLITE and OBSIDIAN DAQ systems are labelled to run at min. -10 °C to max. 50 °C, certain configurations can operate in the min. -40 °C to max. +85 °C temperature range.

MULTIPLE CHASSIS OPTION

IOLITE can be configured in the 19-inch cabinet compatible chassis or in more rugged SIRIUS-like compatible chassis (SIRIUS R8rt, SIRIUS R4rt, SIRIUS R2rt).

DUAL MODE

The EtherCAT® slave interface can be used to provide real-time data to a 3rd party control system, while the internal bus allows full-speed recording via DewesoftX software in parallel. Finally, the worlds of data acquisition and control have come together in one system!

FULLY OPENDAQ™ COMPLIANT DEVICES

Dewesoft data acquisition systems OBSIDIAN, IOLITE X, SIRIUS X and SIRIUS XHS fully support openDAQ, an open-source data acquisition SDK (Software Development Kit) that adheres to industry standards. This means you can effortlessly discover, set up, and gather data from any sensors, data acquisition devices, and instruments that are openDAQ-compliant.

The openDAQ SDK stands out for its ease of use, optimized performance, and compatibility across different operating systems, including Linux, MacOS, and Windows. It also supports various popular programming languages, such as Python and C++, among others, allowing developers to work in their preferred coding environment.



KRYPTON® RUGGED SYSTEMS

KRYPTON® CPU

Compact, highly portable logger for data recording in harsh environments from min. -40 to max. +70 °C operating range.



KRYPTON®

Ultra-rugged and distributable data acquisition devices from min. -40 to max. +85 °C operating range.

KRYPTON® 1 SERIES

Distribute your measurements down to a single channel.



MADE TO BE EXTREME

IP67, dust-proof, waterproof, 100 g shock and vibration resistant, wide temperature operating range.

Rugged DAQ system that can be distributed down to a single channel and placed close to sensors. All DAQ systems offer IP67 degree of protection and are thus waterproof, dustproof, shock resistant up to 100G, and can withstand a temperature range up to -40 °C to 85 °C.

SINGLE CABLE

With up to 100 m between devices for power, data and synchronization.

DISTRIBUTABLE DEVICES

Locate your data acquisition hardware close to the sensors.

RUGGED SYSTEMS SIRIUS® AND SBOX

SBOXwe

Ultra-rugged and powerful data logger from min. -40 to max. +50 °C.

SIRIUS®iwe

High-end signal conditioning in rugged form factor from min. -40 to max. +60 °C.



Extremely rugged (IP67 degree of protection) and fully isolated data acquisition system for the most demanding testing in harsh environments. High-precision, high-dynamic, and high-bandwidth for all types of analog signals from IEPE to strain gages.

DEWESOFT 7-YEAR WARRANTY

Our warranty covers that the instruments function as promised for a period of 7 years from the day of the delivery.

SIRIUS® DAQ TECHNOLOGY

DualCoreADC®, high dynamic range 160 dB, high isolation, SuperCounter®.

MADE TO BE IP67 EXTREME

Dustproof, waterproof, 100 g shock and vibration resistant, wide temperature operating range.

INSTRUMENTS, ACCESSORIES & SENSORS

DEWE-43A

Award-winning and versatile 8-channel USB data acquisition system with unmatched price/performance ratio and hand-size footprint. 8 universal analog inputs, 8 digital/counter/encoder inputs, and two high-speed CAN bus inputs.



SIRIUS® MINI

Small and highly portable, USB powered data acquisition system ideal for acoustic, vibration, and rotating machinery analysis.



DC-CT-1000I

Patented current sensing technology with 1000 A measurement range, high bandwidth and low consumption in a compact form factor.



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SENSOR POWER SUPPLY

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ISOLATED CAN-FD AND CAN BUS INTERFACE

High-speed CAN-FD channels with up to 8 Mbit/s and CAN 2.0b with 1 Mbit/s data throughput with additional support for CCP, OBDII, J1939, and CAN output.

UNIVERSAL ANALOG INPUTS

A wide variety of universal and analog amplifiers that accept voltage and full/half/quarter bridge signals natively as well charge and IEPE accelerometers, thermocouple and RTD temperature sensors, current, resistance, and even LVDT sensors, with the use of DSI adapters.



DSI ADAPTERS

TEDS equipped adapters that turn SIRIUS, KRYPTON, or IOLITE DSUB9 voltage or strain analog input into a truly universal input supporting a wide variety of signals.



PCM FS2

Dual PCM output up to 40 MBit/s in real time from Dewesoft analog data, Chapter 10, simulated data, and other sources.



BATTERY PACKS

Dewesoft Li-ION battery packs perfectly match our data acquisition systems for stand-alone, in-vehicle, or remote test and measurement applications.



CAN / CAN FD INTERFACES

Multichannel USB and single channel EtherCAT® CAN BUS. Software with support for OBDII, J1939, XCP/CCP, CAN transmit, DBC, and AUTOSAR XML files.



MOUNTING PLATES

Flexible and robust mounting plates for Dewesoft data acquisition systems..



DS-WIFI

DS-WIFI device is a Wi-Fi modem for long-range wireless data transfer between our data acquisition systems. It is perfectly suited for testing moving objects and for remote measurement applications.



DISPLAYS

Rugged, high-resolution, and shockproof LCD displays and display accessories for mobile, and in-vehicle test and measurement applications.



CAMERAS

Dewesoft video data acquisition supports standard and high-speed video cameras (DirectX and GigE), thermal cameras for temperature acquisition and visualization, and Ultra-High Speed video synchronization.



GPS AND IMU DEVICES

High-accuracy 100 Hz GPS receivers and Inertial Measurement Units (IMU) with Real-time Kinematics (RTK) support for the most precise position based test and measurement applications.



CLAMPS & TRANSDUCERS

High-accuracy sensors for AC/DC current measurement and power analysis. From current clamps, high-precision zero flux current transducers, shunts, and Rogowski coils.



VIBRATION SHAKERS

A full range of modal and inertial shakers with integrated, easy-to-use amplifiers. These permanent magnet shakers are compact, lightweight, and powerful general-purpose units for modal and vibration testing, offering high DUT capacity despite their small size.



ETHERCAT® ACCESSORIES

Dewesoft video data acquisition supports standard and high-speed video cameras (DirectX and GigE), thermal cameras for temperature acquisition and visualization, and Ultra-High Speed video synchronization.



TURN-KEY TEST AND MEASUREMENT SOLUTIONS

We have designed our data acquisition systems to be universal and versatile and to tackle every test and measurement application. Our plug-and-play DAQ systems can be used out of the box but offer the flexibility that will give you endless possibilities. All our testing applications run on the same easy-to-use data acquisition software which will make you fall in love with your testing work. Our products will introduce several benefits to your work. Faster learning curve, less cost, and finally, all your captured data will be perfectly synchronized and compatible.



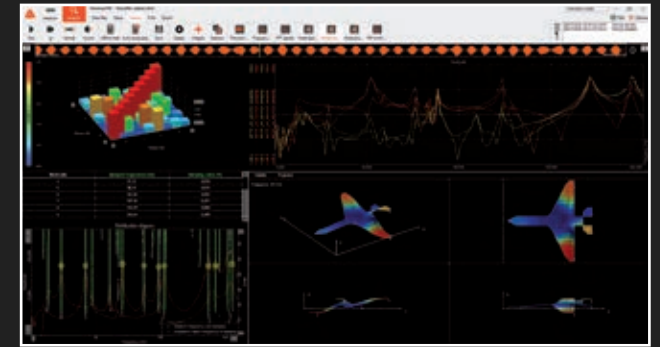
GENERAL DATA RECORDING

Dewesoft offers very flexible data loggers and data recorders for low, medium, and high-speed data logging and data recording applications. Our data loggers offer perfectly synchronized data recording from a wide variety of data sources.



POWER ANALYSIS

We offer innovative data acquisition instruments for power analysis and power quality with 0.03% accuracy for high voltage and AC/DC current measurement. Our power and power quality analyzers can be used for any power-based test and measurement application. Flexible, robust, and highly accurate DAQ hardware with easy-to-use DAQ software it's power and power quality analysis never experienced before.



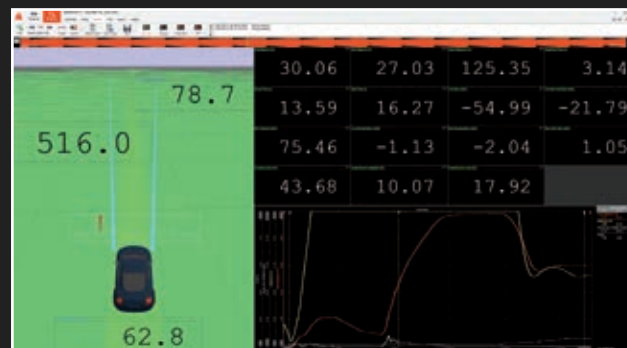
VIBRATION ANALYSIS

Vibration analysis and vibration testing are essential in every product design and any maintenance. Vibration may influence the durability and reliability of mechanical systems or structures and cause damage, abnormal stopping, and severe safety issues. Vibration measurements can prevent such problems. Dewesoft offers easy to use solutions for FFT analysis, order tracking analysis, torsional vibration, orbit analysis, and octave band analysis.



ACOUSTICS ANALYSIS

We offer easy-to-use, yet advanced products for acoustics testing to accurately measure and characterize sound and noise emissions of your products. Our one-stop acoustic test solution covers all essential sound measurement applications such as Sound Level, Sound Power, Sound Quality, Sound Intensity, Octave Band Analysis, and Reverberation Time RT60.



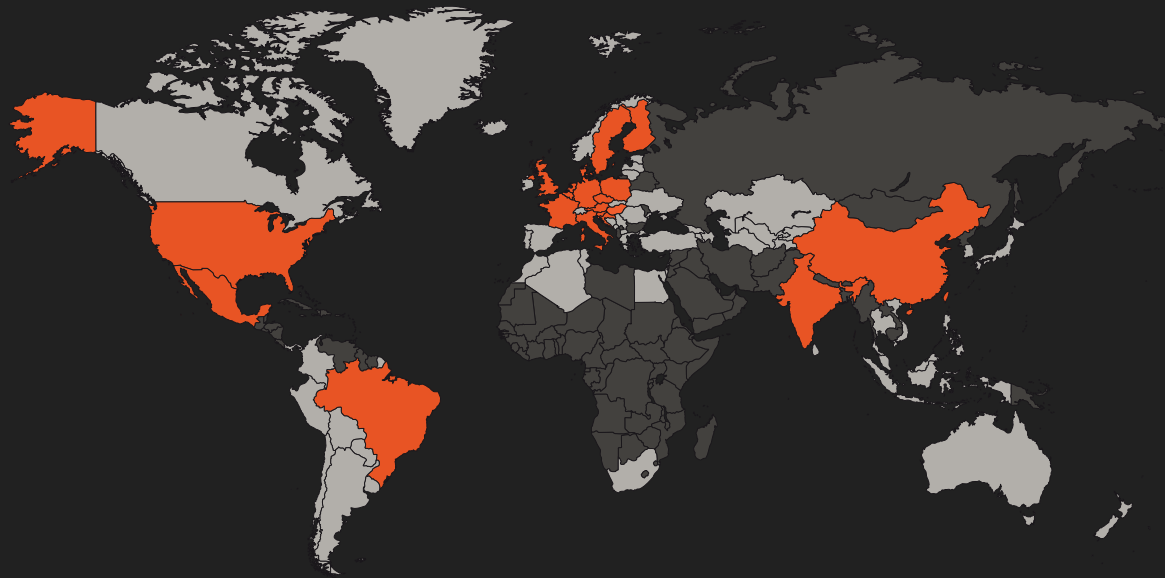
VEHICLE ANALYSIS

High-end solutions for vehicle performance, vehicle dynamics, vehicle durability, combustion, electric and hybrid engine testing, components testing, and more. Our unique range of supported data interfaces - Analog, Digital, Counter, CAN, CAN FD, OBDII, J1939, XCP/CCP, FlexRay, Kistler Wheels, Video, GPS+RTK, Inertial Navigation, etc. - all with pin-point synchronization offers an all-in-one solution for all kinds of vehicles, from passenger cars, autonomous cars, trucks, heavy machinery, ships, and airborne vehicles.



MONITORING

Dewesoft offers a variety of affordable solutions for testing and monitoring applications such as structural health monitoring, e.g. of bridges and buildings, or machine condition monitoring of all kinds of industrial and rotating machinery such as turbines or generators for wind or hydropower plants.



DEWESOFT® WORLDWIDE: SLOVENIA, Austria, Belgium, Brazil, Croatia, Czechia, China, Denmark, Finland, France, Germany, Hong Kong, Hungary, India, Italy, Mexico, Poland, Singapore, Sweden, UK, USA and PARTNERS IN MORE THAN 50 COUNTRIES

HEADQUARTERS
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