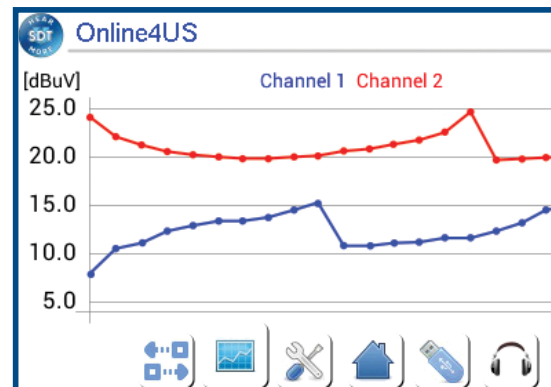




Online4US

**Permanent monitoring
of production assets with
ultrasound and vibration**



- Autonomous and evolutionary system
- Up to 32 measurement channels in real time
- Many measurement types
- User-friendly and easy to install
- Various communication modes
- Possibility for in-depth diagnosis
- 4 monitoring indicators

For maximum reliability of your production assets

The ideal solution when competitiveness is associated with a reduction in costs, elimination of risks, an improvement of production performance and greater reliability of installations.

Online4US is the first modular continuous monitoring system that can combine measurements of ultrasound and vibration but also of temperature and rotation speed. By combining the available condition indicators (RMS, Max RMS, Peak and Crest Factor values) the manager can also determine a security strategy that is tailored to the specific situation of each machine.

Online4US makes it possible to replace the periodic monitoring in many applications with continuous monitoring. The system can be used simultaneously:

- as an independent **monitoring device**. The set alarms alert the manager of the smallest defect.
- as a **diagnostic device** coupled with our portable measuring instrument SDT270 and the maintenance software SDT Ultranalysis Suite (UAS) through the acquisition of time signals (dynamic signals).

Online4US prevents equipment malfunction, warns of anomalies and delivers a check-up of the device regardless of the installation. There are an unlimited number of configurations possible that meet the specific needs of each sector of activity, and any environment.



Online4US includes a DIN rack with a central unit with touchscreen, sensor modules and interface. The system is upgradeable. From a single platform it can manage up to 32 channels, alarms and inputs and outputs in real time and offers various communication modes. It makes it possible to connect a large number of SDT and external sensors. The measurements from all connected sensors are recorded permanently and simultaneously.

Online4US is a robust and user-friendly system, easy to configure and easy to install. It is a cost-effective system for the monitoring and diagnosis of devices.

Applications

- Bearings, gears and rotating machines
- Steam traps, valves
- Pump cavitation
- Partial discharge
- Various gas leaks

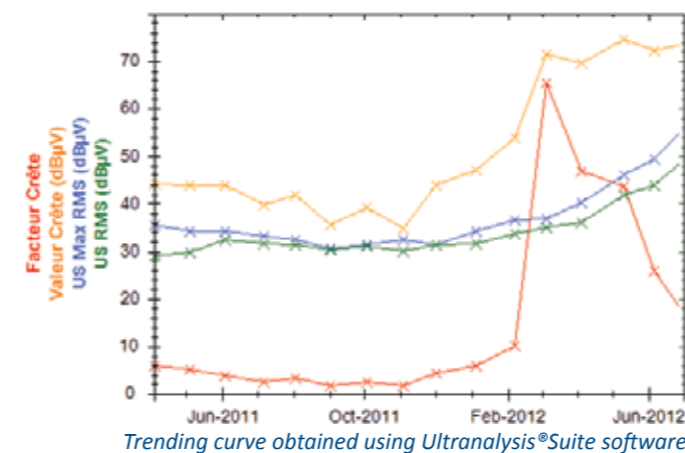
The sensors

- Ultrasonic
- Vibration
- Speed
- Temperature

Communication modes

- Inputs / Outputs
- RS232 /485
- Ethernet
- GSM
- Wifi

Online4US



Settings

- Number of measurement channels
- Alarm threshold
- Rejection of false alarms
- Acquisition time
- Measurement periodicity

The condition indicators

- RMS
- Max RMS
- Peak
- Crest factor
- Measurements of ultrasound, vibration acceleration and speed, and temperature.

Coupled to the SDT270 and Ultranalysis® Suite, the Online4US becomes a device for in-depth diagnosis

Acquisition of measurements

The static measurements are stored in the 32 GB internal memory of the Online4US and can be copied onto a USB memory stick and saved.

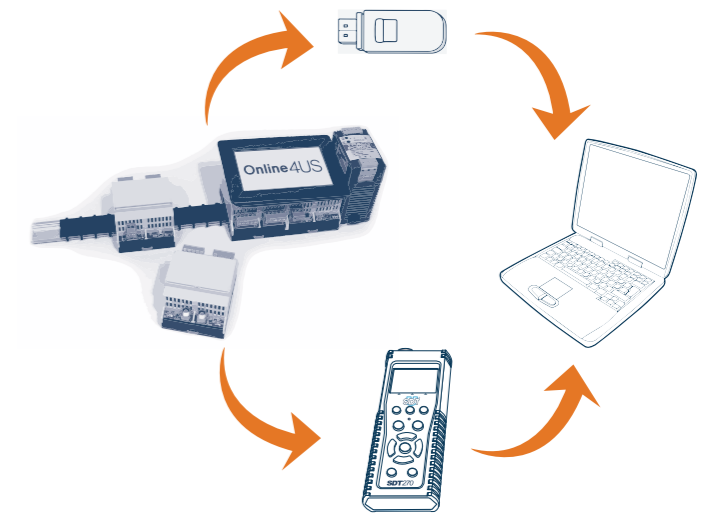
The acquisition of dynamic signal measurements on a given sensor is done with a SDT270 device.

Transfer and storage of measurements

Via a USB stick all measurements stored in Online4US are transferred and stored in the Ultranalysis Suite software.

The dynamic measurements, collected by the SDT270, are also transferred to UAS.

All measurements automatically take their place in the tree structure with 7 levels set by the user to manage his equipment.

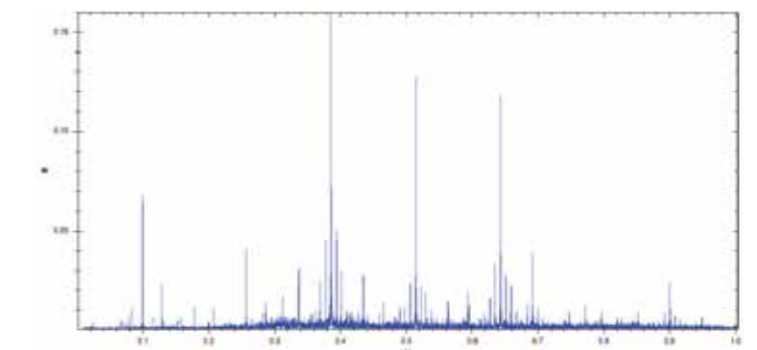


Analysis of trend curves, time and frequency signal

The display of the trend curves with UAS shows the evolution of the state of the machine, based on its history.

At a glance, the user can compare the state of his machines by the superposition of the trend curves.

On the basis of the analysis of the dynamic data, the diagnosis of the machine can be drawn up.



Frequency domain representation

SDT support

Our goal is to preserve the effectiveness of your ultrasonic measurement equipment so you can focus on the maintenance of your assets.

SDT's technical support services guarantees that your products and software operate to the standards you expect. It ensures your access to the most current software and firmware.

Online4US Technical Specifications

Modules

Central unit	Settings, management of modules, measurements and alarms. Internal memory and USB flash drive (not included) up to 32 GB each. 5" colour touchscreen. Ethernet interface, RS232 and 485, OSC protocol (OpenSourceControl). Type A USB 2.0 Host
Sensor modules	Modules for US sensors and module for accelerometers. 2 sensors per module. Max. 16 modules. 2 connectors per module for direct connection of the SDT270.
Module with inputs	1 module with 8 digital inputs, 24 VDC. External power supply.
Module with outputs	8 digital outputs per module. Max. Switching Capability 750 VA. Max. 4 modules. External power supply.
Communication module	1 Wi-Fi module or Bluetooth or GSM/GPRS
Electric power supply	To choose from: • 24 VDC (100 mA + 100 mA per module) • SDT power supply: universal input: 85-264 VAC, 50/60 Hz (1.2 A to 115 VAC, 0.6 A to 230 VAC) output: 24VDC (2.5A)
Housing	Ingress protection: IP65
Temperature range	-10 to 40 °C
Relative humidity	0 to 90%, non-condensing
Cables for sensors	Standard 10 m. Up to 30 m on request

Ultrasound measurement

Measurement range	- 7 dB μ V to + 120 dB μ V
Bandwidth (heterodyne signal)	To choose from: • 500 to 3500 Hz • 1000 to 2000 Hz
Sampling rate	64 kHz
Indicators	Effective value (RMS), Max. sub RMS, peak and crest factor

Vibration measurements

Measurement range	0.1 to 20 g
Bandwidth	To choose from 10 to 1000 Hz or 10 to 10000 Hz
Sampling rate	64 kHz
Indicators	Effective value (RMS) of the vibration acceleration and speed, peak and crest factor of the vibration accelerations

SDT, leader in acoustic detection for industrial maintenance

Thanks to its 40 years of experience, SDT has become the undisputed leader in its field. SDT designs and produces measuring instruments for condition monitoring of production assets. With an extensive knowledge of industrial maintenance requirements, SDT combines its intelligent and progressive instruments with powerful database management software and certified training. The success of the company rests on its commitment to provide effective and preventative solutions to its customers needs while allowing them to improve their profitability.



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