

Online4US

ONLINE ULTRASOUND & VIBRATION ASSET CONDITION MONITORING



- Stand-alone system
- Modular and flexible
- Up to 32 measurement channels
- Data & machine status posting
- Easy, user-friendly set-up
- 4 condition indicators



Ultrasound
Solutions

www.sdtultrasound.com

SDT Online4US

Online4US utilizes ultrasound and vibration to provide continuous feedback about the health of your factory

Designed for critical and remote access assets, its versatility is limited only by your imagination :

- Bearing condition monitoring
- Low speed gearboxes and bearings
- On-condition acoustic lubrication
- Imbalance, misalignment, looseness, coupling and belt wear
- Pump cavitation
- Electrical fault detection (corona, tracking and arcing)
- Steam trap and valve testing
- Leak detection (pressure and vacuum).

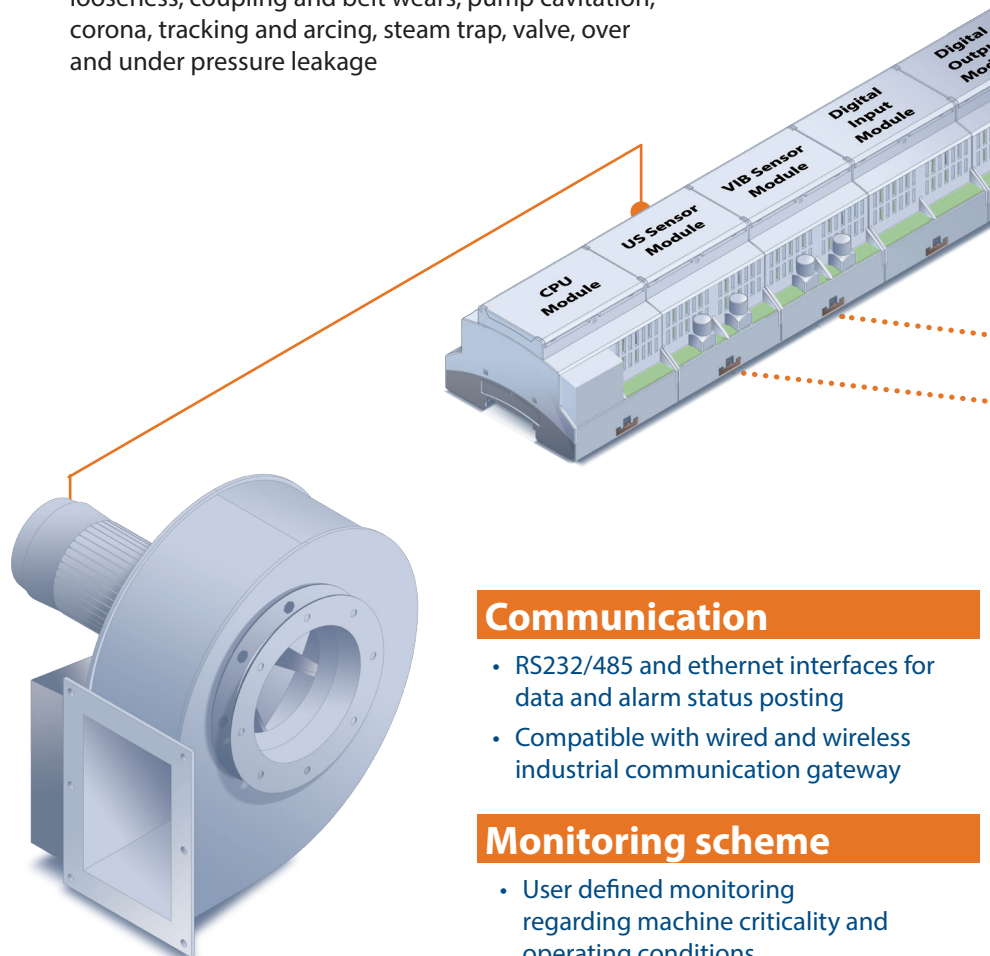
Online4US is a modular solution configured to your unique requirements. As your needs change, Online4US changes too. Add measurement channels, inputs, outputs, and communication features. Pay for what you need today with the flexibility to scale the system for the future.

Features and Benefits

- Synchronous or continuous, triggered or periodic measurements
- Up to 32 channels for vibration, airborne and structure borne ultrasound sensors
- One connector per channel for dynamic measurement collection with an SDT device
- Digital and analog inputs for triggered measurements Digital outputs for local alarm status posting
- RS232/485 and ethernet interfaces for remote wired data and alarm status posting
- Compatible with wired and wireless industrial communication gateway
- On board memory for data and settings storage
- Human machine interface with an intuitive operation 5" colour screen for machinery health and settings display
- IP65 painted steel or 304L stainless steel enclosure with a glass door for harsh environment
- Quick and convenient cable entry management without the need of cable cutting.

Applications

- Ultrasound and vibration sensors for every situation
- Bearing, gearing, even low speed, under and over greased conditions, unbalance, misalignment, looseness, coupling and belt wears, pump cavitation, corona, tracking and arcing, steam trap, valve, over and under pressure leakage



Communication

- RS232/485 and ethernet interfaces for data and alarm status posting
- Compatible with wired and wireless industrial communication gateway

Monitoring scheme

- User defined monitoring regarding machine criticality and operating conditions
- Synchronous or continuous, triggered and periodic measurement

Online4US

Online condition monitoring of your most critical assets

Benefits of monitoring asset condition with Online4US

Achieving whole lifecycle; Planning maintenance intervention in a cost effective way; Analyzing failure modes so they can be eliminated through design improvements; These are just some of the benefits of monitoring your critical and hard to access assets with SDT's Online4US.

Asset reliability requires meaningful data. That's why we built Online4US on the backbone of SDT's innovative portable data collector. At the heart of this technology is the Four Condition

Indicators (4CI) with programmable data acquisition time. Combining ultrasound and vibration data in this way provides you with the earliest indication of failure.

Online4US is fully compatible with SDT's portable product range. Connect your SDT device and collect Dynamic Data from any of the 32 sensor inputs. All Static Data stored in Online4US 4GB memory is transferred to a computer using a USB memory stick.

Online4US offers a complete online asset condition management solution at an attractive price. Its large colour screen offers all user information and programming at a glance and a touch. The IP65 rated enclosure and sensors means worry free operation in the harshest environments. Quick cable management makes installation simple. Online4US is an innovative and disruptive solution for online asset condition monitoring.

Modularity

- Customizable and upgradable configuration for a sustainable investment
- Up to 32 synchronous channels



Inputs and outputs

- Digital and analog inputs for external triggering
- Digital outputs for local alarm status posting

Human machine interface

- Red-yellow-green machine health status at a glance

Alarms

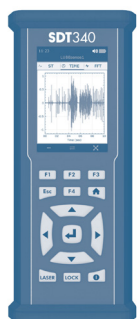
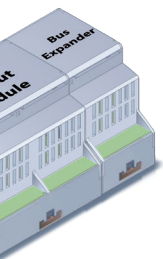
- Intelligent alarm management for maximum efficiency
- User defined settings per channel
- Programmable delay for false alarm rejection

Conditions indicators (4CI)

- For an early stage failure detection, severity and progression evaluation
- RMS, Max sub RMS, peak and crest factor

Compatibility


- In-depth signal analysis using the SDT devices dynamic data collection



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 firmware.

SDT Online4US Technical Specifications

CPU module	Internal SD card memory. 1 Ethernet socket, max baud rate 10 Mbps, 1*RS232 and 1*RS485 socket, max baud rate 38.4 kbps, 1 type A USB 2.0 Host socket. Monitoring: synchronous continuous, triggered or periodic. Acquisition time: adjustable from 1 to 99 seconds. Customizable alarm and alarm delay per channel.	Communication module	Compatible with wired and wireless industrial communication gateway
Display	5 inches colour touch screen. Resolution 800 x 480 pixels.	Enclosure	1 main enclosure with a glass door for up to 7 modules + CPU module + power supply module + termination module. 1 extension enclosure with a steel door for additional modules, up to 9 modules. Each enclosure dimensions are 500 x 400 x 210 mm. Painted steel or 304L stainless steel. IP 65 rating.
Digital input module	8 electrically insulated digital AON inputs. External power supply.	Power supply	24 VDC \pm 2.5%, 2.5 A. Ripple and noise less than 50 mV peak-to-peak on 20 MHz bandwidth. Optional: 85 to 264 VAC – 50/60 Hz. 0.6 A for 115 VAC and 0.3 A for 230 VAC, low noise.
Analog input module	8 analog inputs. Measuring range 0 to 10 VDC. 8 bits resolution.	Operating temperature	0°C to 50 °C (32 to 122 °F) max 90% relative humidity, non-condensing.
Digital output module	8 electrically insulated digital AON outputs per module. Max 16 outputs on 2 modules. Breaking capacity 750 VA max. External power supply.		
Ultrasound sensor module	Auto gain. Measuring range up to 90 dB. Measurement types: RMS, Max sub RMS, peak and crest factor. 2 channels per module, max 32 channels over 16 modules (including vibration sensor modules). Transducer type: airborne and structure borne US sensor.		
Vibration sensor module	Auto gain. Measuring range up to 10 g peak-to-peak. 10 to 1 kHz bandwidth. 2 channels per module, max 32 channels over 16 modules (including ultrasound sensor modules). Measurement types: acceleration and velocity RMS, acceleration peak and crest factor. Transducer type: ICP accelerometer 100 mV/g.		

OUR MISSION:

SDT provides ultrasound solutions that help our customers gain a better understanding about the health of their assets. We help them predict failures, control tightness, optimize energy costs, and improve product quality while contributing to the overall reliability of their organization.



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