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.

SDT Online4US Technical Specifications

CPU module	Internal 4 Gb SD card memory. 1 Ethernet socket, max baud rate 10 Mbit, 1 RS232/485 socket, max baud rate 115 Kbit, 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.
Display	5 inches colour touch screen. Resolution 800 x 480 pixels.
Digital input module	8 electrically insulated digital AON inputs. External power supply.
Analog input module	8 analog inputs. Measuring range 0 to 10 VDC. 8 bits resolution.
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 20 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.

GSM module	SMS and data information transmission. Quad-band 850/900/1800/1900MHz. GPRS multi-slot class 12/10. GPRS mobile station class B.
RF module	RF transceiver. World-wide license free 2.4GHz ISM Industrial band operation. On-air data rate of max. 2Mbps.
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.
Power supply	24 VDC ±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.
Operating temperature	0°C to 50 °C (32 to 122 °F) max 90% relative humidity, non-condensing.

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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Online4US ACM

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

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SDT Online4US ACM

Online condition monitoring of your most critical assets

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).

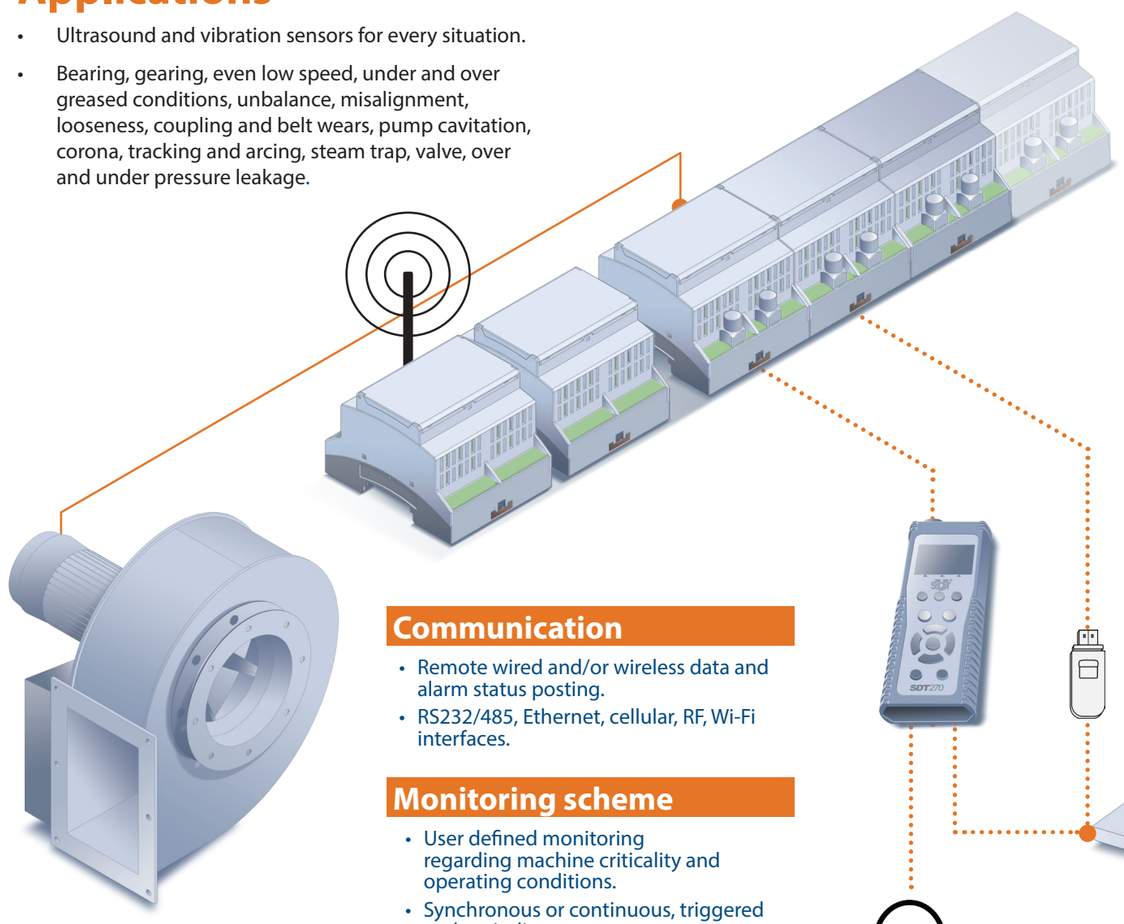
Online4US is a modular solution configured to your unique requirements. As your needs change, Online4US changes too. Add measurement channels, inputs, outputs, and communication features. Pay for what you need today with the flexibility to scale the system for the future.

Features and Benefits

- Synchronous 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 a SDT270.
- Digital and analog inputs for triggered measurements and variable speed machinery.
- Digital outputs for local alarm status posting.
- Wi-Fi, RF and cellular interfaces for wireless alarm status posting.
- RS232/485 and Ethernet interfaces for remote wired data and alarm status posting.
- On board 4 Gb memory for data and settings storage.
- Data importa, backup and analysis through Ultranalysis software.
- 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.



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 SDT270 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 SDT270DU and collect Dynamic Data from any of the 32 sensor inputs. All Static Data stored in Online4US 4GB memory is transferred to Ultranalysis Suite using a USB memory stick. Uploaded data is seamlessly inserted to UAS's custom built database.

Online4US offers a complete online asset condition management solution at an attractive price. It's 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.

Communication

- Remote wired and/or wireless data and alarm status posting.
- RS232/485, Ethernet, cellular, RF, Wi-Fi interfaces.

Monitoring scheme

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

Inputs and outputs

- Digital and analog inputs for triggering, variable speed and temperature.
- Digital outputs for local alarm status posting.

Human machine interface

- Red-yellow-green machine health status at a glance. Trending curves and curve overlays for wear progression visualization.

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

- Extends your PdM program by importing measurements into UAS.
- In-depth signal analysis using the SDT270's dynamic data collection.

Online4US ACM