



# SDT270

*Hear More*



Ultrasound  
Solutions

[www.sdtultrasound.com](http://www.sdtultrasound.com)

## How We Help

SDT provides ultrasound solutions that give our customers greater understanding about the health of their factory. We help them predict failures, control energy costs, and improve product quality while contributing to the overall uptime of their assets.

# SDT270

## The Ultrasound Solution

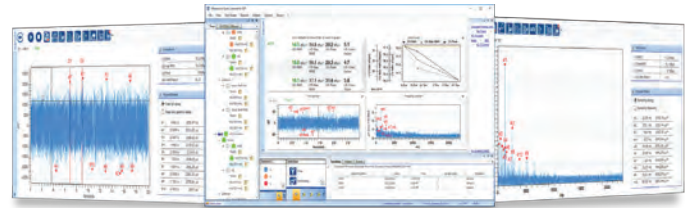
- Measure Ultrasound, Vibration, RPM and Temperature in one box
- 4 Condition Indicators for a more thorough diagnosis: (RMS, maxRMS, Peak, and Crest Factor)
- Two Channel Inputs for sensors and accessories
- Intrinsically safe version available for potentially explosive environments
- Record clear, accurate, comparable ultrasound wave files
- Upgradeable firmware to flexibly grow with your program
- Remote support and training
- Device and sensors are calibrated to ensure consistent, repeatable performance.



## Where We Help

Ultrasound inspection has more applications than any other condition monitoring technology. Dollar for dollar it is the most versatile instrument in your PdM tool box.

## Ultranalysis Suite<sup>©</sup>



Ultranalysis Suite is the most powerful ultrasound software ever written for PdM and Reliability Managers and has revolutionized the way we use ultrasound.

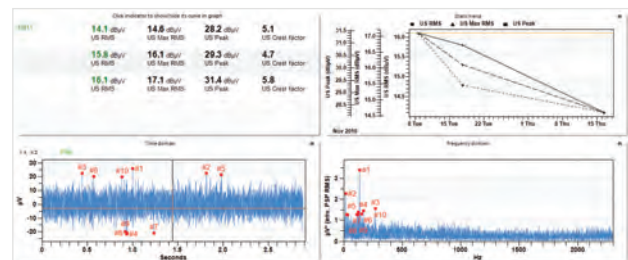
With UAS collect and manage your Ultrasound, Temperature, RPM, and Vibration data in one software program.

### Alarms, Trending & Analysis

SDT gives you the tools to structure your surveys, perform data trending and advanced signal analysis. Ultranalysis Suite lets you establish baseline readings and set alarms that tell you when your equipment is transitioning from good to bad.



- With custom alarm levels you can see asset conditions at a glance
- Static data trending allows you to track an asset's condition over time
- Analysis of dynamic data spots fault conditions in critical rotating assets.







## Bearing Monitoring

Your production depends on healthy rotating assets. You can monitor the condition of your plant's machinery with the SDT270. Trend and analyze ultrasound, vibration, temperature, and RPM. The SDT270 and UAS alert you when things transition from good to bad.



## Acoustic Lubrication

Incorrect lubrication of bearings shortens their lifespan. Knowing when to grease, and how much to grease, are the keys to optimizing bearing lubrication. Predict re-lubrication intervals and add just the right amount of grease with SDT's integrated ultrasound greasing solutions.

## Low Speed Bearings

Monitoring failure stages of low speed bearings with vibration analysis is difficult. The SDT270 is the perfect companion to vibration analysis, capturing dynamic sound files to perform failure mode analysis in the Time Domain using SDT's Ultranalysis Suite Software (UAS).



## Steam Systems

Working steam traps keep your steam system pure, safe, and energy efficient. The SDT270 delivers ultrasound and temperature data so you can identify all your failed traps and keep your steam system productive and healthy.



## Air Leaks and Vacuum Leaks

Compressed air is expensive to produce yet 35-40% of demand is wasted by leaks. With the SDT270 you can find all your leaks quickly and safely so you can save money while lowering your carbon footprint.



## Electrical Faults

Partial discharge is a constant threat to your safety, and the health of your electrical systems. The SDT270 reveals electrical fault conditions in metal clad switchgear, substations, and overhead transmission and distribution lines. Use SDT and listen before you look.

## Ultrasound Training

### We take training seriously... and so should you.

Training is the cornerstone of an effective and enduring ultrasound inspection program. Investing in implementation training is an essential first step to establishing ultrasound as a pillar of your Condition Based Monitoring initiative. SDT's training programs were developed by the world's leading ultrasound minds.



As a global leader in ultrasound technology we understand the challenges inspectors face in applying instrument to application. Our vision to create a network of world class ultrasound inspectors is being realized every day. Our versatile and experienced trainers are passionate about teaching and eager to help you reach your ultrasound goals.

### Why Invest in Training?

Companies that invest in training enjoy a higher level of interest and participation across more departments while implementing inspections for more applications. Not only do the programs endure, but the return on investment is almost immediate.

## SDT270 Technical Specifications

<b>Built-In Measurements</b>	Ultrasonic Sensor, Infrared Temperature, Tachometer and Vibration	<b>Minimum sensitivity</b>	-31dB (@40 kHz, 0 dB-1 V/ $\mu$ bar) Equal to a flow rate up to 10-3 std. cm <sup>3</sup> /sec
<b>External Sensors</b>	2 ports (Lemo 7pin connector)	<b>Headphones</b>	Capable of working in noise levels up to 130 dBA
<b>Data Logger Models: SS, SD, DD</b>	100 Measurement Nodes 4000 points in Total DataDump software	<b>Intrinsically Safe</b>	ATEX certification meets directive 94/9/EC (II 1 G Ex ia IIC T3/T2 Ga) comparable to Class I, Div 1, groups A, B, C & D Recognized by CSA
<b>Data Logger Models: SU, DU</b>	10000+ static measurements points 6675 seconds for dynamic data 13350 seconds for accelerometer 10Hz - 1Hz band 1668 seconds for accelerometer 10Hz - 10kHz band Ultranalysis Suite Software	<b>Physical Characteristics</b>	Housing: Extruded Aluminum Weight: 830g /29.3oz (with battery & holster) Dimensions: 226 x 90 x 40mm (8.9 x 3.54 x 1.57 inches)
<b>Communication</b>	USB Interface	<b>Protective Casing</b>	Shock Resistant Silicone
<b>Auto Power Down</b>	After preset time - adjustable by user	<b>Battery Pack</b>	Rechargeable 8 cell 4.8v, 4600mAh NIMH
<b>Response Time</b>	<9 milliseconds	<b>Safeguards (Battery)</b>	Short-circuit, reverse polarity & temperature protection

### Our promise to be our best for you

At SDT we believe we have a responsibility to produce products that help our global economy while at the same time sustain our planet for future generations. Giving our best to you is more than just a commitment, it is our promise.

## Support

Our focus is maintaining your ultrasound assets so you can focus on maintaining your company's assets.

SDT Technical Support Services are here to ensure that your SDT products and software operate to the standard you expect and that you benefit from the most current firmware and software available.



# LUDECA

LUDECA, Inc  
1425 N W 88th Avenue  
Doral, FL 33172  
www.ludeca.com

Phone: (305) 591-8935  
Fax: (305) 591-1537  
email: info@ludeca.com



**Ultrasound  
Solutions**

PO Box 682, Cobourg, ON  
K9A 4R5 Canada  
Toll Free North America  
1-800-667-5325

International Phone  
905-377-1313  
Fax  
905-377-1402

www.sdtultrasound.com  
info@sdttheartmore.com