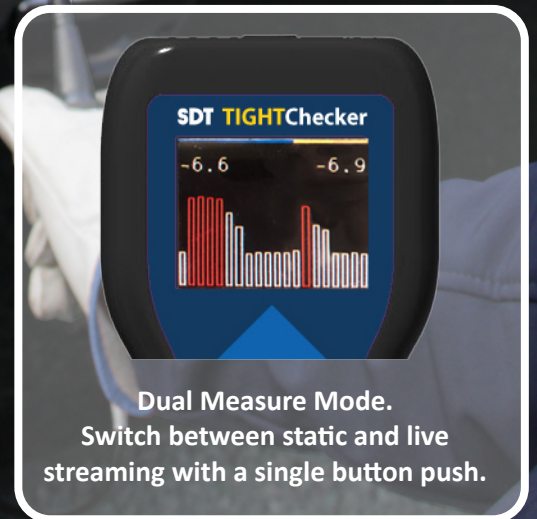


# TIGHTChecker

EVERYTHING LEAKS...



Dual Measure Mode.  
Switch between static and live streaming with a single button push.

## Focused

Tightness integrity is an issue that plagues every industry. TIGHTChecker is an ultrasound solution focused on pinpointing leaks in any volume. Cars, trains, airplanes, buildings, cleanrooms... TIGHTChecker checks them all.

## Simple

TIGHTChecker is so easy to use. Simply open the box, position the T-Sonic1, seal the volume and listen for leaks. TIGHTChecker's crystal-clear sound and vibrant colour display pinpoints even the smallest leaks.

## Affordable

With so many things to test, TIGHTChecker is in high demand. It's low entry cost, versatility, and SDT quality make it the most affordable solution for testing everything that leaks. And everything leaks.

## Powerful transmitter fills any volume with ultrasound



# T-SONIC1



Ultrasound Solutions

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

# TIGHTChecker features

## Description

The TIGHTChecker is an ultrasound solution designed to verify the tightness of closed volumes. Use TIGHTChecker to pinpoint the exact location of leaks in vehicles, buildings, tanks, and ships.

The TIGHTChecker works with SDT's ergonomic Flexible sensor and compact T-Sonic1 transmitter.

## Kit Contents

- TIGHTChecker
- T-Sonic1
- Flexible sensor
- Sensor cable
- USB Cable
- Headphones
- Screwdriver
- 4 AA Batteries
- Carrying case



### TIGHTChecker Specifications

General	
Function	Ultrasound measurement device
Operable with	SDT FlexID2 and with SDT T-Sonic1
Measurement interface	1 channel via a 7 pole LEMO connector
Display	160x128 pixels Color OLED
Keyboard	5 function keys
Typical measurement range	-6 to 99.9 dB $\mu$ V(reference 0 dB = 1 $\mu$ V)
Resolution	0.1 digits
Measurement bandwidth	35 to 42 kHz
Signal amplification	+30 (built-in sensor gain) dB to +102 dB by step of 6 dB
RMS period time	250 milliseconds (main screen) / 3 sec (bar graph)
Sampling frequency	64 kHz/ksps
ADC Resolution	12 bits
Environmental	
Operating temperature range	-10 to +50 °C   14 to 122°F
IP rating	IP42
Standards	EN 61326-1:2013, EN 55011:2016 + A1:2017, EN 61000-4-2:2009, EN 61000-4-3:2006 + A1:2008 + IS1:2009 +A2:2010
Mechanical	
Housing material	ABS
Dimensions housing	158x59x38.5 mm   6.22"x2.32"x1.51"
Weight	164g   5.78oz
Battery/Utility connector	USB Mini-B 5-pin
Power	
Battery	2 AA batteries
Autonomy	7 hours
Audio	
Operable with	SDT provided head set only
Headset	25dB NRR Peltor HQ headset

### T-Sonic1 Specifications

General	
Transmitter frequencies:	39.6 and 39.9 kHz
Vobulation period:	80 ms
Transmitted Sound Pressure Level : at 100 cm, Ref. 0 dB=0.0002 $\mu$ bar	Boost off : 85 dB SPL Boost on : 105 dB SPL
Beam angle with -6 dB of attenuation:	60°
Power supply:	2 AA batteries
Autonomy with Alkaline batteries:	30h
Environmental	
Operating temperature range	-10 to +50°C 14 to 122°F
IP rating	30
Mechanical	
Housing material	Acrylonitrile Butadiene Styrene (ABS)
Weight including batteries	122g (4.3oz)
Connector for external transducer	Jack 3.5
Optional Accessories	
FUSEUSTC18/J3M : External Closed Transducer 18mm, cable 2.5m, jack 3.5	
FUSEUSTO16/J3M : External Open Transducer 16mm, cable 2.5m, jack 3.5	

### FlexID2 Specifications

General	
Sensor type	Airborne removable resonance sensor $\varnothing$ 10mm
Resonant frequency	40.0 $\pm$ 1.0 KHz
Bandwidth	2.5 kHz at -6dB
Sensitivity with removable sensor $\varnothing$ 10mm	-42dB (at 40.0KHz; 0dB = 1 volt/ $\mu$ bar)
Length	545 mm / 21.8 in
Weight	336 grams / 11.8 oz
Operating Temperature	-30 to 70°C / -22 to 158°F Non-condensing
Connector	Lemo 7 poles

## The SDT Checkers Range: Ultrasound detectors for every application and budget.

**LEAKChecker:** Find compressed air and vacuum leaks.

**TRAPChecker:** Assess the condition of traps and valves.

**LUBEChecker:** Optimize bearing lubrication.

**TIGHTChecker:** Verify the tightness of closed volumes.

**HATCHChecker:** When hatch cover tightness matters.

**ULTRAChecker:** Check everything.



### SDT: leader in acoustic detection for industrial maintenance

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



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The TIGHTChecker is part of the SDT product range that combines robustness and high performance. It is available through our worldwide authorized distributor network.