

#### **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





# **TIGHT**Checker 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**

## **T-Sonic1 Specifications**

### FlexID2 Specifications

		•			
General		General		General	
Function	Ultrasound measurement device	ransmitter frequencies: 39.6 and	39.6 and 39.9 kHz	Sensor type	Airborne removable resonance sensor Ø 10mm
Operable with	SDT FlexID2 and with SDT T-Sonic1	Vobulation period:	80 ms		
Measurement interface	1 channel via a 7 pole LEMO connector				
Display	160x128 pixels Color OLED	Transmitted Sound Pressure Level : at 100 cm, Ref. 0 dB=0.0002 μbar	Boost off: 85 dB SPL Boost on: 105 dB SPL	Resonant frequency	40.0±1.0 KHz
Keyboard	5 function keys				
Typical measurement range	-6 to 99.9 dBμV(reference 0 dB = 1 μV)				
Resolution	0.1 digits			Bandwidth	2.5 kHz at-6dB
Measurement bandwidth	35 to 42 kHz			Bandwidth	2.3 KHZ at-00B
Signal amplification	+30 (built-in sensor gain) dB to +102 dB by step of 6 dB	Beam angle with-6 dB of attenu- ation:	60°	Sensitivity with removable	-42dB (at 40.0KHz; OdB = 1 volt/μbar)
RMS period time	250 milliseconds (main screen) / 3 sec		2.441		
	(bar graph)	Power supply:	2 AA batteries		
Sampling frequency	64 kHz/ksps	Autonomy with Alkaline batteries:	30h	sensor	
ADC Resolution	12 bits			Ø 10mm	
Environmental		Environmental		Length	545 mm / 21.8 in
Operating temperature range	-10 to +50 °C   14 to 122°F	Operating temperature range	-10 to +50°C 14 to 122°F	Weight	336 grams / 11.8 oz
IP rating	IP42		14 tO 122 F	0	20+- 70°C / 22
Standards	EN 61326-1:2013, EN 55011:2016 +	IP rating	30	Operating	-30 to 70°C /-22
	A1:2017, EN 61000-4-2:2009, EN 61000-	Mechanical		Tempe- rature	to 158°F Non- condensing
	4-3:2006 + A1:2008 + IS1:2009 +A2:2010				
Mechanical		Housing material	,		Lemo 7 poles
Housing material	ABS		Butadiene Sty-		,
Dimensions housing	158x59x38.5 mm  6.22"x2.32"x1.51"		rene (ABS)		
Weight	164g   5.78oz	Weight including batteries	122g (4.3oz)	1	
Battery/Utility connector	USB Mini-B 5-pin				
Power		Connector for external transducer	Jack 3.5		
Battery	2 AA batteries	Optional Accessories			
Autonomy	7 hours	•			
Audio		FUSEUSTC18/J3M: External Closed Transducer 18mm,			
Operable with	SDT provided head set only	cable 2.5m, jack 3.5			
Maximum audio output (protection)	+83dB SPL with SDT headset	FUSEUSTO16/J3M : External Open Transducer 16mm,			

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

cable 2.5m, jack 3.5

**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.

HATCHecker: When hatch cover tightness matters.

**ULTRAChecker:** Check everything.













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

25dB NRR Peltor HQ headset

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.