

SDT LEAKChecker: Datasheet

Description:

SDT LEAKChecker is an ultrasound solution designed to find compressed air and vacuum leaks in noisy environments. Measure the level of the leak with LEAKChecker, and then estimate its cost impact with the LEAKReporter App, available for free on the App store. SDT LEAKChecker comes with a 16mm diameter replaceable ultrasound sensor.



Specifications:

General		
Function		Ultrasound measurement device
Display		160x128 pixels Color OLED
Keyboard		5 function keys
Typical measuring range	dB μ V	-6 to 99.9 (reference 0 dB = 1 μ V)
Resolution	digits	0.1
Measurement bandwidth	kHz	35 to 42
Signal amplification	dB	+30 to +102 by step of 6 dB
RMS period time		250 ms (main screen) / 3 sec (bar graph)
Sampling frequency	kHz	64
ADC Resolution	bits	12
Minimum sensitivity	dB	-31dB (@40 kHz, 0 dB-1 V/ μ bar)
Sensitivity		Class I exceeding ASTM 1002-11 requirements for gas leak detection
Firmware update		Via SDT Updater https://sdtultrasound.com/support/software/
Environmental		
Operating temperature range	°C (°F)	-10 to +50 (14 to 122) non-condensing
IP rating		IP42
Compliance		EMC compliant (directive 2014/30/EU) ROHS compliant (directive 2011/65/EU)
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	mm (in)	158x59x38.5 (6.22x2.32x1.51)
Flexible rod length (Removable sensor)	mm (in)	445(17,51)
Weight	g (oz)	350 (12.35 oz)
Battery/Utility connector		USB Mini-B 5-pin
Power		
Battery		2 AA size batteries
Autonomy		7 hours
Audio		
Operable with		SDT provided headset only
Headset		25 dB NRR Peltor quality headphones
Warranty		
Lifetime warranty		Visit www.sdtultrasound.com for details

Kit content:

Reference	Designation FS.LKC.001-01
FU.LKC.001-01	LEAKChecker w/o sensor, w/o batteries (S/N (550) YY XXXX)
FU.LKC.UGD.001-01	LEAKChecker – User’s guide w/ datasheet
FA.FLX2.R16.001-01	Removable sensor 16 mm for FLX2 (plastic housing)
SIRUBSENS18MMSI	RUBBER for sensor \varnothing 18mm NBR rubber
SIBAT1,5VALK-AA (*2)	BATTERY Alkaline 1,5V AA (Maxell-Panasonic-Duracel-Sanyo)
FUHDPH-21	HT52B-112 3M PELTOR CH-3 FLEX2 Listen only headphones w/ neckband
SICABUSBAUSBBM	SB2412 USB2.0 Cable usb type A<>USB type B5 mini,1.8m-black
FUTOOLSCRDRIV	IT3874 Screwdriver set w/ 6 bits - grey w/ led - no print
FU.LKC.CBOX.001-01	T6 Evolution plastic case blue/green locks - LEAKCecker (w/logo SDT+foam)

NB: Additional details are available from the download section of SDT web site: www.sdtultrasound.com

Safety recommendations:

- Read and follow the user manual.
- Do not expose the equipment to rough handling or heavy impacts.
- Do not disassemble the instrument.
- Do not use the equipment in areas where its use is prohibited (ex: Ex Zones).
- Do not expose the equipment to high humidity or direct contact with water.
- All repairs and calibrations must be performed by SDT or authorized services.
- Using any other headset or any sensor than the ones supplied with the instrument can cause internal damage to the equipment.
- Permanent hearing loss may occur if you use your headset at a high volume. Set the volume to a safe level.

5	CMA 2022/02/25	Safety recommendation + updater	CGI
4	CMA 2021/03/01	Safety recommendations	RGO
3	CMA 2020/01/05	Add new info	RGO
2	CMA 2020/06/25	Revised version	CGR
1	AKP 2017/08/29	Original version	JPE
Ver.	Editor	Nature of modification	Verified

*The information herein is believed to be accurate to the best of our knowledge.
Due to continuous research and development, specifications are subject to change without prior notice.*