



SDT ULTRAChecker : Datasheet

Description:

SDT ULTRAChecker is an ultrasound solution designed to use the full range of both airborne and structure-borne 2nd generation ultrasound sensors with built-in preamplifier.



Specifications:

General		
Function		Ultrasound measurement device
Operable with		FlexID2, LUBESense1, RS2T, RS2N, AIRSense, ULTRASense, ParaDish2 (since v3.1.508)
Measurement interface		1 channel via a 7 pole LEMO connector
Maximum cable length	m (ft)	Up to 30 (98) (since v 3.1.535)
Sensitivity		Class I exceeding ASTM 1002-11 requirements for gas leak detection with the appropriate sensor.
Display		160x128 pixels Color OLED
Keyboard		5 function keys
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/ksps	64
ADC Resolution	bits	12
Firmware update		Via SDT Updater
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)
Weight	g (oz)	164 (5.78)
Battery/Utility connector		USB Mini-B 5-pin
Power		
Battery		2 AA batteries, rechargeable or non-rechargeable
Autonomy		7 hours
Audio		
Operable with		SDT provided headset only
Headset		25 dB NRR Peltor quality headphones
Warranty		
Lifetime warranty		

Kit content:

Reference	Designation FS.ULC.002-01
FU.ULC.001-01	ULTRAChecker w/o Batteries (S/N 557 YY XXXX)
FU.ULC.UGD.001-01	ULTRAChecker – User's guide w/ datasheet
SIBAT1,5VALK-AA (x2)	BATTERY Alkaline 1,5V AA (Maxell-Panasonic-Duracel-Sanyo)
FU.SEN.UTS.001-01	ULTRASense US sensor (S/N 006 YY NNNN)
FU.SEN.RS2T.001-01	RS2T THREADED sensor w/o cable (black cover, S/N 532 YY XXXX)
FUCABLSPLE7LE7-10	CABLE SPIRAL – LEMO7P<>LEMO7P L=6/18dm Black/Black
SA.CP2.MMF.002-B	NEEDLE Assembly 133 mm CP2
FUSEACMAG-02	Curved magnetic foot D30*23
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.ULC.CBOX.001-01	T6 Evolution plastic case blue/grey locks - ULTRAChecker (w/logo SDT+foam)

Accessories:

Reference	Designation
FU.SEN.LUBE.001-01	LUBESens1 w/o cable (Blue cover – S/N 540 YY XXXX)
FU.SEN.RS2N.001-01	RS2NL100 NEEDLE CONTACT PROBE W/O CABLE (NL=82mm - BLACK COVER - S/N 535 YY XXXX)
FU.SEN.RS2N.002-01	RS2NL300 NEEDLE CONTACT PROBE W/O CABLE (NL=275mm - BLACK COVER - S/N 535 YY XXXX)
FU.SEN.RS2N.003-01	RS2NL500 NEEDLE CONTACT PROBE W/O CABLE (NL=470mm - BLACK COVER - S/N 535 YY XXXX)
FU.SEN.AIR.001-01	AIRSense – Airborne US Sensor (S/N 007 YY NNNN)
FU.PAR2.005-01	PARABOLIC SENSOR - PARADISH2 (LASER CLASS 2, <1mW) (S/N 524 YY XXXX)
FU.FLX2.001-01	FlexID2 - W/ AMPLI (NEW PCB) - GOOSENECK 400mm W/O SENSOR (S/N 002 YY NNNN)
	FA.FLX2.R16.001-01 : REMOVABLE SENSOR 16mm FOR FLX2 (PLASTIC HOUSIN S/N DYYNNNN)
	FA.FLX2.R10.001-01 : REMOVABLE SENSOR 10mm FOR FLX2 (PLASTIC HOUSIN S/N CYYNNNN)

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	Compatibility with Paradish2 (firmware >=3.1.508)	CGI
4	CMA 2021/03/01	Safety recommendations, max cable length	RGO
3	CGR 2021/01/04	Corrections, new info	CMA
2	CMA 2020/12/15	Added sensor compatibility	CGR
1	CMA 2020/06/25	Original version	CGR
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.*