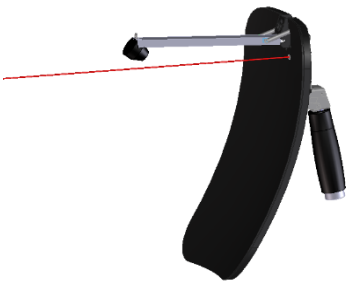
Ultrasound Solutions

Commercial document **DC.PAR2.DAT.001**

Datasheet: PARADISH2 standard and ATEX

Description:

Working in combination with the SDT 270, SDT 200, SDT 340 and ULTRAChecker, PARADish2 is a parabolic ultrasonic sensor designed to safely detect and identify Ultrasound sources at long range. The unmatched sensitivity and directivity combined with the precise optical viewfinder and the integrated laser pointer make it a very convenient tool for leak detection campaigns and partial discharge localization on electrical assets. Also available in ATEX version for the compatible instrument, the sensor is robust, lightweight, and easy to store thanks to its foldable arm and handle.



Specifications:

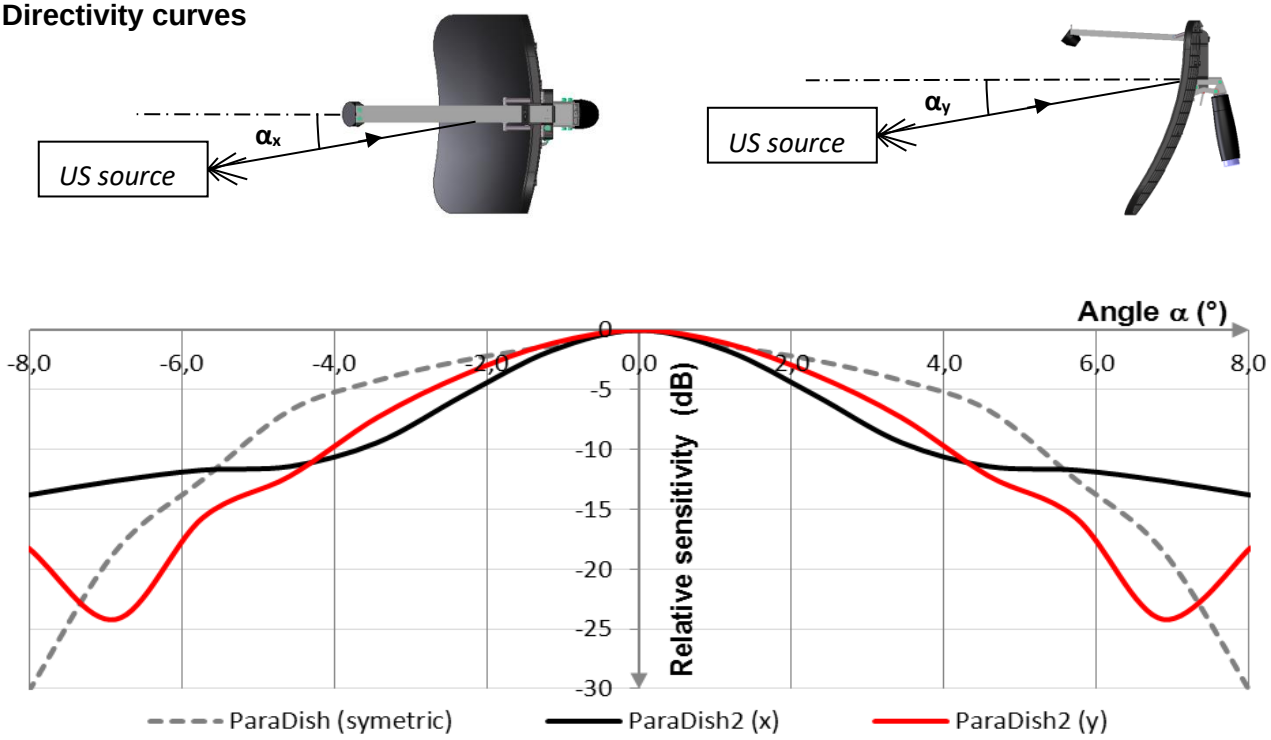
General		
Function		Ultrasound airborne resonant sensor
Operable with		SDT 200/270/340 and ULTRAChecker SDT 200A/270A (ATEX)
Model recognition		FU.PAR2.005/FU.PAR2.006 (ATEX)
Certifications		EMC, ATEX, ROHS (see DoC)
Recommended measurement range	m (ft)	From 5 to 100 (~ 16 to 330)
Center frequency (at 20°C)	kHz	40 ±1
Thermal deviation of the center frequency	Hz/°C	-10
Sensitivity *At 40.0KHz; 0dB = 1 volt/Pa*	dB	+ 12 considering built-in gain
Measurement bandwidth	kHz	2.0 [38.4-40.4]
Built-in gain	dB	+30
Laser Class II (IEC 60825-1) Ref : Infiniter® VLM-650-03 LPT (Quarton)		*P_{OUT} ≤ 1 mW – λ=650 nm – Beam divergence (half angle)=0.6 mrad, Spot size at 5m= 6mm±1*
Environmental		
Operating temperature range	°C (°F)	-15 to +48 (5 to 118)
IP rating		40
ATEX specifications To be used with SDT ATEX devices only		Ⓔx II(1) G / Ex ia II C T3/T2 Ga (FU.PAR2.006)
Mechanical		
Materials		Reflector: conductive ABS

SDT International sa-nv • Bd de l'Humanité 415 • B-1190 Brussels (Belgium) • Tel: +32(0)2 332 32 25 • email: info@sdtultrasound.com
SDT North America • 7677 County Road 2, Cobourg, ON • Phone: 1-800-667-5325 | 1-905-377-1313 • email: hearmore@sdtultrasound.com
www.sdtultrasound.com

		Handle: NBR 70°±5° BLACK R<1GOhm
Dimensions	mm (in)	*339x240x80 (13.35x9.45x3.15)*
Weight	g (oz)	965 (34)
Electrical connector		7-pole LEMO male, integrated spiral cable

NB: Additional details are available at www.sdtultrasound.com

Directivity curves



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. In case of use in Ex-areas, make sure that the combination sensor + SDT instrument, through their respective markings is compliant with the imposed restrictions
- 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 to limit risk of overexposure

Laser class II safety information, risk of injury to the eye

- ***Never look directly to the laser beam***
- ***Never point the laser beam at a person' eye***
- ***Do not aim the laser at specular reflection surfaces***
- ***Never view the laser using an optical instrument.***

8	CMA 10/03/2022	Compatibility with ULTRAChecker	CGR
7	CMA 27/01/2021	Modified version, additional info, laser updates	CGR
6	AKP	New Layout	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.