

Datasheet SDT RAPSODYBOX

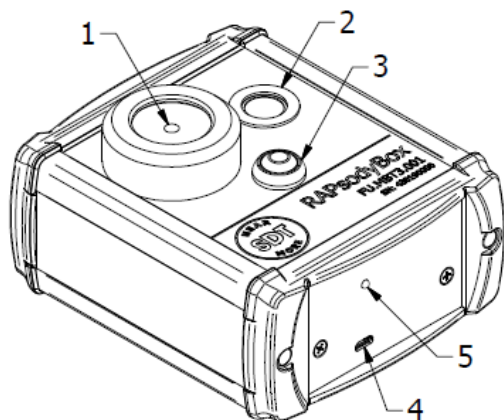
Description:

SDT RAPsodyBox is a signal generator tool that can be used to repeatedly reproduce a series of scenario that can be encountered in industry.

These scenarios can be used to explain the use of SDT measurement devices and show their possibilities as well as analyze the expected behavior on the measurements during machine maintenance, lubrication, leak detection, tightness inspection ...

SDT RAPsodyBox can also be used to reproduce specific recorded signals (using SDT instruments) encountered on the field (for demonstration and training purposes).

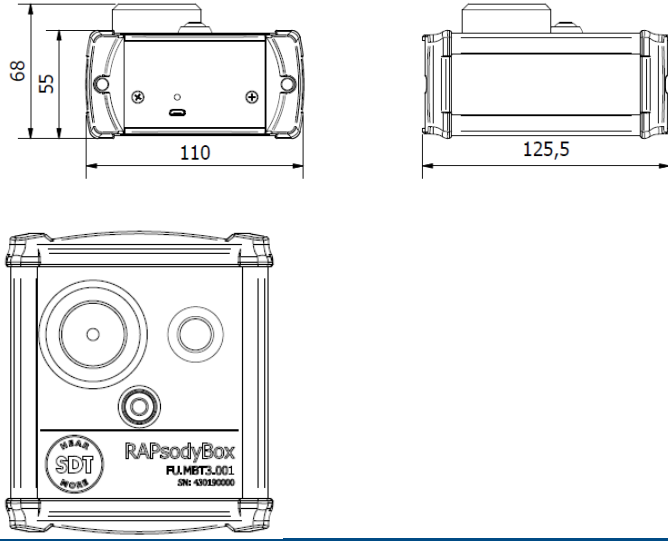
As the signals are known, the box also makes it possible to carry out a series of functional tests on the sensors and the devices to check and control the integrity of the measurements (for testing and conformity purpose).



1. Structure borne transducer
2. Airborne resonant transducer
3. Push button
4. Micro USB type B
5. Status indicator light

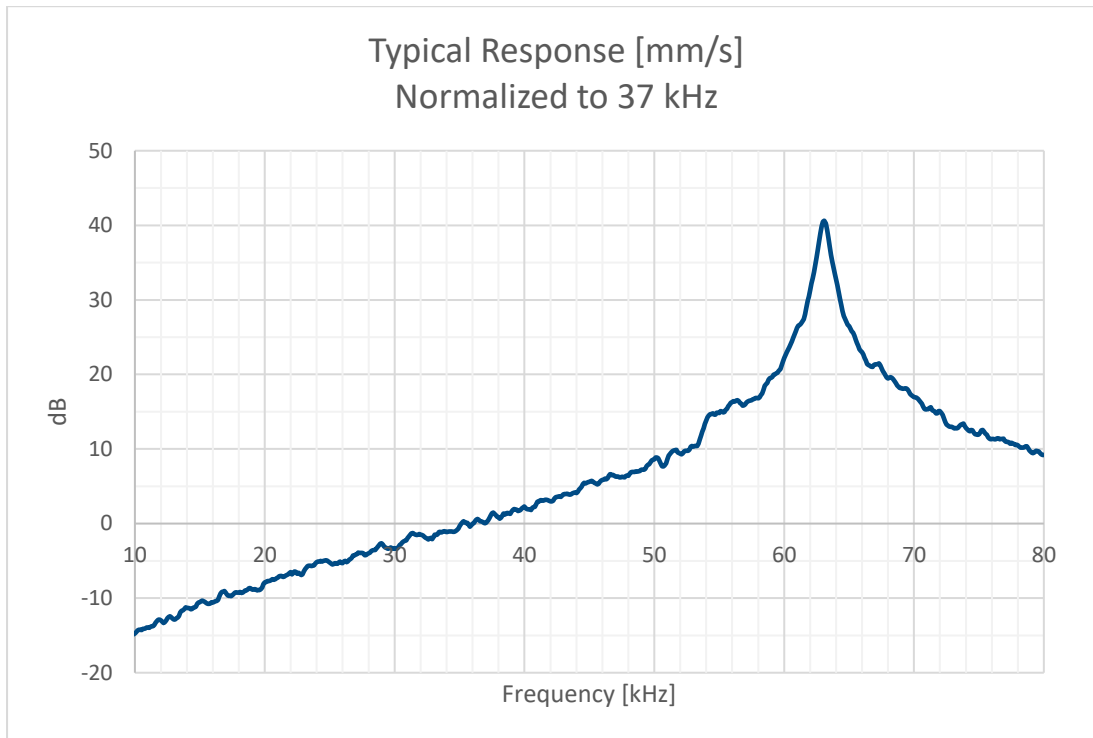
Specifications:

General		
Function		Ultrasound signal generator
Software		SDT RapsodyBox on PC windows
Operable with		SDT devices
Transmitting sources		Contact and airborne
Power supply		Micro USB type B
Communication		USB or Bluetooth
Environmental		

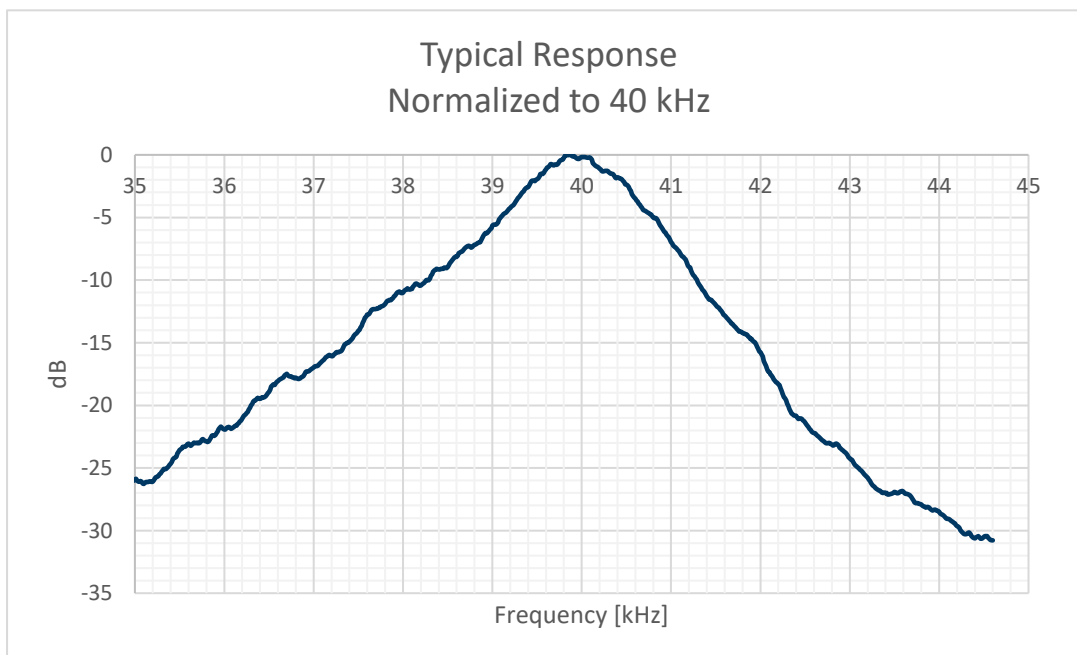
Operating temperature range	°C (°F)	-40 to 85 (-40 to 30)
*for the System on chip BCM2835		
IP rating		40
Approvals		EMC compliant (directive 2014/30/EU) ROHS compliant (directive 2011/65/EU)
Mechanical		
Housing material		Anodized aluminum profile / plastic lid: ABS
Dimensions	mm (in)	
Weight	g (oz)	520 (18)
Signal output (typical)		
Structure borne		
Resonant frequency	kHz	60
Thread		M6
Signal amplitude range	dB	50
Airborne		
Resonant frequency	kHz	40 ± 1
Bandwidth (attenuation of -6dB)	kHz	2 kHz
Transmitting sound level		100 dB _{SPL} at 1 m
*at max volume		
Total beam angle (- 6 dB)	°	55

Response curves:

Typical response curve of Structure borne transducer:



Typical response curve of airborne transducer:



Safety recommendations:

- Do not expose the equipment to rough handling or heavy impacts
- Always read and follow the user manual
- Opening the housing of the instrument may result in hazardous mishandling and voids warranty
- The equipment should not be used in areas where there is a risk for explosion

- Do not expose the equipment to high humidity or direct contact with water
- All repair work must be performed by SDT or authorized services
- Using any other headset or any sensor than the one supplied with the instrument can cause internal damage to the device

*NB: Additional specifications could be found from the download section of SDT web site:
www.sdtultrasound.com*

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2	CMA 2021/07/19	Modified version	CGR
1	CMA 2020/08/24	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.*