

Commercial document

DC.SOVU.DAT.001

Datasheet SonaVu™

Description:

SonaVu[™] is a multi-frequency acoustic imaging camera that takes airborne ultrasound inspection to a new level. Equipped with 112 highly sensitive sonic sensors and a precision optical camera, SonaVu[™] brings the power of super-human hearing to focus on its vibrant, color touch screen. It unlocks limitless applications for asset reliability, energy conservation, and safety including compressed air leak management, electrical asset reliability, and much more.



Specifications:

General			
Model name		SONAVU (FU.SVU.001-01)	
Function		Ultrasound Camera	
Sensor (Microphone)		112 Digital MEMS	
Sample rate	k S/s	96	
Resolution	bits	16	
Full measurement frequency range	kHz	[1-47.5]	
Microphone Sensitivity	dB FS	-41 (Full scale)	
Signal-to-Noise Ratio	dBA	66	
Detection distance (range sensor)	m (ft)	0.3 m to 200 m (1 to 650)	
Gain	dB	0, +10, +20 or +30	
Average function		Fast: update every 3 frames	
		Slow: update every 10 frames	
Measurement bandwidth/mode		Audible mode : 4kHz-20 kHz + direct audible	
		output	
	kHz	Ultrasound mode: 25 kHz-40 kHz +	
		heterodyned audible output	
		Custom mode: set up by user	
Multisource Visualization mode		YES	
HMI (Human Machine Interface)			
Display		5" Color LCD + Touch control	
Screen resolution	pixels	640 x 480, adjustable lighting	
Buttons		Power button and Save button	
Frame rate/response time	FPS	25	
Camera View angle	0	Horizontal 66°, Vertical 54	
Storable data		Video (.avi) and Image (.jpeg)	
Internal memory	GB	~53 GB (7 days for continuous video storage)	
Import/export data transfer		USB Flash drive (FAT 32)	

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Advanced analysis PRPD graphs on display		- · · ·	
		Insight platform for reporting	
Supported languages		English, French, German, Spanish,	
		Portuguese, Dutch, Turkish, Korean, Chinese,	
		Japanese, Croatian, Russian	
Environmental			
Operating temperature range	°C (°F)	-20°C to 50°C (-4°F to 122 °F)	
Operating Humidity	%	10 ~ 85 %	
IP rating		20	
Camera lighting		2 LEDs	
Mechanical and connection ports			
Dimensions	mm (in)	237 x 146 x 56 (9.3 x 5.7 x 2.2)	
Weight	kg (lb)	1.2 (2.65)	
Charging port/Power bank port		LEMO 3P-12V DC	
External display port		HDMI	
Export/firmware update port		USB	
Audio output		1/8" (3.5mm) audio jack and Bluetooth	
Power			
Battery		Lithium-ion battery pack	
Battery Operating Time		4 hours (8 hours with the External battery)	
Battery Charging Time		4 hours	
Charging status		LED indicator	
Legal			
Warranty		2 Years	
Product certifications		Refer to the manual	

Safety recommendation:

- Read the user manual in its entirety prior to operating your SonaVu[™] acoustic imaging camera.
- Follow all instructions for safe operation, care, and maintenance of your SonaVu™.
- Never leave the instrument powered on while stored in the closed case or other enclosure. Doing so could cause the instrument to overheat. Overheating increases the risk of damage to the instrument or the possibility of a fire.
- Avoid subjecting SonaVu[™] to high levels of vibration or shock which could damage the electronics and impact the highly sensitive sensor microphones.
- Do not drop your SonaVu[™] nor expose it to any sudden impacts.
- When charging your SonaVu[™] take care to avoid creating a tripping hazard from the power cord by maintaining a safe and neat workplace. This is both a personnel safety and an instrument care issue.
- Your SonaVu[™] should only be stored in a cool, dry area. Avoid storage rooms that are hot, humid, dirty, dusty, or in direct sunlight. Also avoid storing your SonaVu[™] in rooms where other chemicals are kept.
- Do not use the equipment in areas where its use is prohibited (ex: Ex Zones).
- Avoid using your SonaVu[™] in environments outside the prescribed temperature ranges listed on the specification section (-20°C to 50°C or -4°F to 122°F).
- Keep your SonaVu[™] away from powerful magnets, power meters, and other similar sources.

- Use care when connecting and disconnecting cables and cords from the main body of your SonaVu[™]. When disconnecting, grip by the connector – never by the cable itself – and gently pull in a direction perpendicular to the plug. When connection, grip by the connector, align the plugs, and gently insert in a direction perpendicular to the plug. This will avoid unnecessary damage to the cable connection pins.
- Use caution in dirty environments. Avoid the introduction of foreign matter to your SonaVu[™], especially around the sensor array, camera lens, and heat shield.
- Never disassemble or modify your SonaVu[™] Acoustic Imaging Camera. Doing so automatically voids the warranty.
- In the unlikely event that your SonaVu[™] does not work as expected, accurately document the details of the failure and contact SDT Ultrasound Solutions or an authorized service representative.
- Your SonaVu[™] contains electronic components and lithium-ion batteries. SDT encourages its consumers to properly dispose/recycle unwanted batteries and end-of-life products in accordance with local Federal and state regulations. One solution is to contact MRM E-Cycling Management. Their mission is to bring manufacturers together to help provide convenient, environmentally responsible recycling opportunities to consumers: www.mrmrecycling.com.

6	JP 2024/05/01	Revision	JAP
5	CMA 2022/03/22	Safety recommendation	CGI
4	CMA 2021/09/08	Revision	CGI
3	CMA 2021/06/23	Additional info	КМІ
2	CMA 2021/06/17	New layout	KMI
1	CMA 2021/03/02	Original version	KMI
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.