VS130EP Multifunctional acoustic imaging camera Technical Protocol - Infrared

Technical agreement on the design, construction and testing of acoustic imaging camera reached after friendly consultations between the supply and demand sides, as follows:

This Agreement, which is an annex to a commercial contract, has the same legal effect as a commercial contract.



I. Technical specifications

1. This agreement sets out minimum technical requirements for VS130EP multifunctional acoustic imaging camera that were procured

The functional design, structure, performance and testing of the product shall follow the following specifications: 2

GB/T 34638-2017	**leak detection Method without loss**
GB/T 191-2009	**Packaging storage chart signs**
GB/T 6587-2012	**General norms for electronic measurement instruments**
GB/T 13306-2011	**Mark**
GB/T 25480-2010	Basic environmental conditions for instrumentation transport, storage and testing methods
ASTM B209-2014	**Standard norms for aluminium and aluminium alloys, sheeting and beryllium**
GB/T 4208-2017	**Shell protection level (IP code)**
GB/T 3836-2021	**Electrical equipment requirements for explosive environments**

3. Products can be used for leak detection and partial discharge detection of insulation components for all gases.

II. Performance parameters

Serial number	Parameter Type	Parameter indicators
I. Acoustic component		

1	**Handheld**	**Keep your hands on it.**
2	**Dimensions**	255*196*52
3	**Weight**	2.09kg (includes wristband, angular mat, shoulder belt)
4	**Shell**	**Aluminium alloy, black.**
5	**IP Level**	IP56
6	**Display**	**10 Inch Capability**
7	**Show screen resolution**	1920*1080
8	**Cloud Chart Frame Rate**	25FPS
9	**Camera**	**1200 10,000 fixed focal length**
10	**Visual corner**	60° * 40°
11	**The microphone.**	132 MEMS
12	**Measurement frequency**	2kHz~100kHz
13	**Position precision**	≤1°
14	**Battery**	5000mAh@11.1V
15	**Time of renewal.**	4h
16	**Storage space**	128GB
17	**Data interface**	**Support for TIF Cards/USB**
18	**Lighting**	**1w Refill Light**
19	**Steady-state algorithm**	**Steady/transient algorithms are available**
20	**scene transition**	**A typical scenario one-key switch**
21	**Frequency adjustable**	Frequency ranges can be manually adjusted for different acoustic scenarios
22	**Thresholds adjustable**	**Thresholds can be manually adjusted to filter background noise**
23	**Dynamic scope adjustable**	**Dynamic range manual and automatic**
24	**Smart Noise Reduction**	With smart noise reduction, the noise reduction box can manually edit size and shape **Status**
25	**Assessment of leakage rates**	**Real-time assessment of gas leakage rates**
26	**Layout**	**Show partial dischargePRPD maps in real time**
27	**Picture Remarks**	**Supports photo comments**
28	**Data acquisition**	**You have photo, video and data back.**

29	Report Generation	Support this machine to generate inspection reports
II. Infrared component		
1	**Type**	Infrared oxidized oxen oxide non-refrigerant
2	**Pixels**	640*512
3	Camera Focal length	15mm
4	Temperature range	-20℃~550℃
5	**Start Mode**	**Hot Start**
6	It's like a dollar size.	12um
7	Response Scope	8-14um
8	Minimum Focus Distance	5m
9	**Focus**	**Auto**
10	Frame frequency	50Hz/60Hz
11	Temperature precision	**±2°C or read ±2%, to take high value**
12	**Show Mode**	Infrared detection models allow for photo, video, showing the highest temperature, **Minimum temperature at the centre;** **Support painting and independent thermal imaging models**
Use and storage conditions		
1	Use temperature	-25℃~50℃
2	Storage temperature	-20℃~40℃
3	Use Environment	**10%-92% without condensation**
4	Bomb protection level	Ex ic II C T4 Gc
5	Electromagnetic compatibility	(1) EVC resistance test matches IEC Requirements for 61000-4-2:2008 Level IV; (2) The radio-frequency electromagnetic field radiation resistance test is consistent with IEC 61000-4-3:2020 Level IV requirements

III. Scope of supply

Serial number	Name	Specifications and models	Units	Number	Remarks

1	Multifunctional acoustic imaging camera	Acoustic + Infrared + Internal Leak Detection	Station	1	
2	Ultrasound Inner Spectrum Probe		individual	1	
3	Pressure-resilient protection box	100kg	individual	1	
4	Power backup	10000mA	individual	1	
5	Charger	220V to 12V/2A	Set	1	
6	Card Reader		Only	1	
7	Random information	user manual, pass, warranty, etc.	Set	1	

IV. Responsibilities of the parties

1. Supply-side liability

1) Responsible for the design, production and supply of products, ensuring that they are of good quality and do not involve abuse.

2) Responsible for the repair of loopholes in products, upgrade of versions, etc.

2. Responsibilities of the needing party

The required party shall secure and use the product in accordance with these Norms to avoid human damage to the hardware component.

V. Quality assurance period and services

1. (a) The term of the warranty is 1 years after the arrival of the goods at the required site or as agreed in the contract;

2. During quality assurance and debugging, the supplier is responsible for providing free maintenance for non-anthropogenic failure;

(b) Replacement free of charge if it is impossible to repair;

3. In case of problems, the supplier should respond within the hour of 12.