

Ultrasonic / Sound Camera

BATCAM 2

Partial Discharge · Gas Leak · Abnormal Noise Detection



Ultrasonic / Sound Camera

BATCAM 2 **Sx**

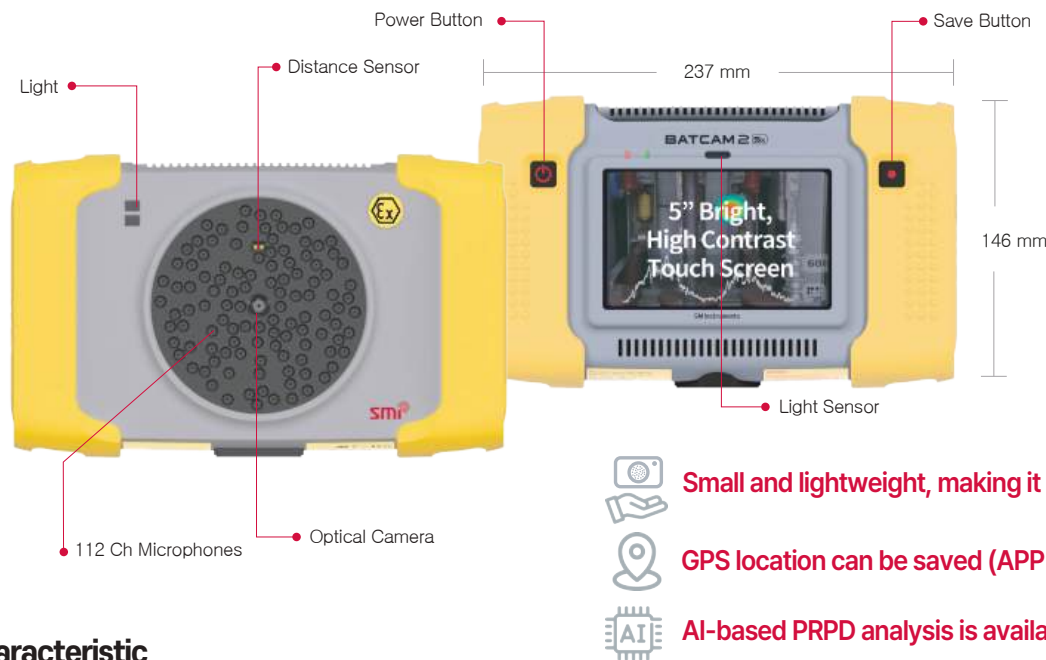
✓ (GIS : Geographic Information System)

GIS, cloud-based data analysis management features added to **BATCAM 2 **Sx**** From electrical discharges and Gas leaks to various noise sources

Now meet BATCAM 2Sx with improved performance such as sampling rate, display, UI and more.

The newly introduced BATCAM 2Sx is equipped with GIS and cloud-based data analysis capabilities to increase user work efficiency. The measurement sensitivity is increased by detecting gas leaks using 112 microphones, measuring signals in the discharge, abnormal noise, and ultrasonic bands from 2 kHz to 100 kHz.

It also performs well in measuring high frequency noise



-  **Small and lightweight, making it easy to carry**
-  **GPS location can be saved (APP connection)**
-  **AI-based PRPD analysis is available**

Characteristic

Hardware

- 112 Digital MEMS Microphones
- USB-C type data transmission And charging
- Measurement and analysis up to 100 kHz
- Audio and HDMI outputs
- 5" Bright High Contrast Touch Screen
- Available Up to 5 Hours
- Distance Sensor
- LCD Brightness Automatically

Software

- Visualize real-time sound sources and Display sound pressure
- Single/Multiple/Full view source **New** Measurement mode selectable
- Real-time air/gas estimated leakage and Loss amount
- AI-based PRPD Analysis and Partial Discharge Measurement
- Save images and videos (JPG/MP4)
- Digital Zoom
- Self-Testing Microphones
- Supports BATCAM Zone (Web/App)
- Supports automatic power-off

Report

- Gas leak report
- Estimated leakage flow rate, Estimated annual loss amount, Etc
- Partial discharge report
- PRPD graph and auto classification

Application Example

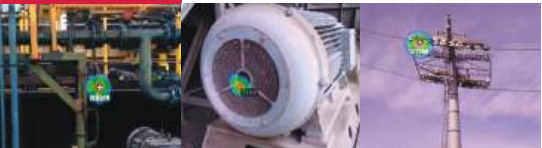
Partial Discharge



Gas Leak



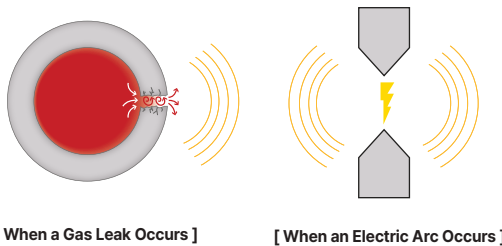
Abnormal Noise



Principle of Ultrasound Measurement

When a gas leak occurs, it results in ultrasonic wave element, higher than the audible frequency. Ultrasonic wave elements also occur in electrical AC currents. Therefore, in noisy environment, ultrasonic wave element can be measured to determine if there are active gas leaks and/or electrical faults.

BATCAM 2Sx can detect a leakage rate of 24 cc/min at a pressure of 0.4 bar from a distance of 1 meter. If the leakage rate is higher, it can be detected from even greater distances.



Specifications

Sensor(Microphone)	112 Ch Digital MEMS
Effective Frequency Range	2 k ~ 100 kHz New
Acoustic Measurement	Detection threshold 2 kHz : 2.34 dB SPL 20 kHz : 2.22 dB SPL 40 kHz : 1.90 dB SPL 55 kHz : 1.22 dB SPL 70 kHz : 1.84 dB SPL 100 kHz : 20.10 dB SPL
Minimum leak rate	1 m, 0.4 bar, 24 cc/min
Test Distance	0.5 ~ 200m
Camera pixel / FOV	8 MP / Horizontal 63°, Vertical 40°
Image Resolution	1024 x 608
Frame Rate	25 FPS
Digital Zoom / Auxiliary lights	x3 ZOOM / LED x 2
Display Resolution	5" Color LCD (800 x 480)
Brightness	1000 nit
Touch Screen	Capacitive Touchscreen

Data Format	JPG, MP4
Storage / Video Length	21GB (Save 8,400 Pictures, Video 20hours) / 30min
Data transfer	USB-C, Bluetooth 5.0 Support
Operating time (charging time)	Up to 5 hours (Up to 4 hours)
Built-in Battery	Rechargeable Battery - Li-ion (48.24 Wh) Samsung SDI INR18650-35E
Operating temperature	-20 ~ 50 °C
Product Size / Weight	237 x 146 x 56 (mm) / 1.1 kg
Certifications	KC, CE, FCC
Explosion-proof Certifications	Ex :  II 3G Ex ic IIC T5 Gc ATEX : TI25ATEX 3190 X (certified according to EN IEC 60079-0:2018, EN 60079-11:2012)
Supported Language	Chinese (Traditional, Simplified) Croatian, Dutch, English, French German, Japanese, Korean, Portuguese Russian, Spanish, Thai, Turkish
Warranty extension program	Warranty 2 years Additional 3 years + 1,950 USD