SVANTEK
monitoring systems



# SV 303

## Noise Monitoring Terminal

The SV 303 is a cutting-edge Noise Monitoring Terminal engineered to transform urban noise management in smart cities. Designed to comply with Class 1 standards of IEC 61672-1:2013 and IEC 61260-1:2014, the SV 303 ensures exceptional accuracy and reliability in noise measurement. This terminal is perfectly suited for capturing the diverse soundscapes of urban environments, offering a wide operating range.






# SV 303

## Noise Monitoring Terminal

### Multipoint Class 1 Monitoring

Superior specifications with affordable pricing

The SV 303 offers Class 1 accuracy at an affordable price, making it ideal for widespread deployment in urban environments. This allows for comprehensive noise assessment and effective management of noise pollution across multiple points in a city.

### Lifetime MEMS Microphone Warranty

Reliable performance guaranteed for life

The SV 303 features a MEMS-based microphone with a lifetime warranty and a patented continuous system check, ensuring consistent and reliable performance. This long-term durability reduces maintenance costs and provides peace of mind for city planners and policymakers.

### Seamless System Integration

Easily integrates with existing systems

Designed for flexibility, the SV 303 can be seamlessly integrated into existing urban monitoring infrastructures, such as air quality, dust, and weather systems. Its versatile interfaces, including USB and UART, ensure it can be installed wherever there is a power source and communication network, enhancing overall environmental management capabilities.

## Key Functions

### Class 1 Accuracy

The SV 303 meets Class 1 standards (IEC 61672-1:2013, IEC 61260-1:2014) with a frequency range of 20Hz to 20kHz, ensuring precise noise measurement.

### Single Measurement Range

The SV 303 meets Class 1 standards (IEC 61672-1:2013, IEC 61260-1:2014) with a frequency range of 20Hz to 20kHz, ensuring precise noise measurement.

### Environmental Resilience

Built to withstand outdoor conditions, the SV 303 performs reliably in temperatures from -20°C to 60°C and up to 95% humidity.

### Low Power Consumption

The SV 303 operates on a standard 5 V, 1A power supply like a USB device, with a Li-Ion rechargeable battery serving as a backup for up to 8 hours of operation.

### Easy Integration

With USB and UART interfaces, the SV 303 seamlessly integrates with existing monitoring systems, including air quality, dust, and weather monitoring infrastructures.

### Easy Instalation

The lightweight, all-in-one design of the SV 303 simplifies installation, making it easy to deploy across multiple points in urban areas.

### Advanced Noise Analysis

Optional frequency analysis in 1/3 octave and audio recording capabilities provide detailed noise source recognition, enhancing noise pollution management strategies.

## Software

SvanNET is an advanced online platform designed to support multi-point connectivity with Svantek's noise and vibration monitoring stations, including the new SV 303 NMT. The connection between the SV 303 and SvanNET is enabled through the SD 311 Monitoring System Controller, ensuring seamless data transmission. To guarantee high levels of reliability and data security, SvanNET is hosted on Microsoft Azure™, a cloud platform supported by a global network of Microsoft-managed data centers.

## Related products



**SD 311**
Monitoring System Router



**SV 36**
Class 1
Acoustic Calibrator
94dB/114dB @ 1kHz



**SV 803**
Class 1 4G
Vibration Monitoring Station



**SV 307A**
Class 1 4G
Noise Monitoring Station

## Optional accessories



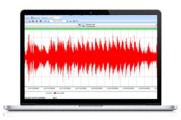
**SA 306**
Pole Mounting Bracket for SV 303



**SA 307**
Carrying Case for SV 303



**SF 303_3**
1/1 & 1/3 Octave Band Analysis for SV 303



**SF 303_15**
Audio Events Recording for SV 303




## Technical specification

| | | |
|---|---|---|
| Standards | Class 1: IEC 61672-1:2013, Class 1: IEC 61260-1:2014 | |
| Weighting Filters | A, B, C, Z, LF | |
| Time Constants | Slow, Fast, Impulse | |
| RMS Detector | Digital True RMS detector with Peak detection, resolution 0.1 dB | |
| Microphone | Patented MEMS based design microphone ST 30B in 1/2" housing | |
| Preamplifier | Integrated | |
| Linear Operating Range | 30 dBA RMS ÷ 133 dBA Peak (in accordance to IEC 61672) | |
| Dynamic Measurement Range | 23 dBA RMS ÷ 133 dBA Peak (typical from noise floor to the maximum level) | |
| Internal Noise Level | Less than 23 dBA RMS | |
| Frequency Range | 20 Hz ÷ 20 kHz | |
| Meter Mode Results | Elapsed time, Lxy, Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), LxyE (SEL),<br>2 x LR (ROLLING LEQ),10 x LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5 | |
| Measurement Profiles | Simultaneous measurement in three profiles with independent set of filters (x) and detectors (y) | |
| Statistics | Ln (L1-L99), complete histogram in meter mode | |
| Data Logger | Logging of summary results (SR) and spectra data with interval step down to 1 s and<br>time history (TH) of selected parameters with shorter interval step down to 100 ms | |
| 1/1 Octave Analysis (option) | Real-time analysis meeting Class 1 requirements of IEC 61260,<br>centre frequencies from 31,5 Hz to 16 kHz | |
| 1/3 Octave Analysis (option) | Real-time analysis meeting Class 1 requirements of IEC 61260,<br>centre frequencies from 20 Hz to 20 kHz | |
| Audio Recording (option) | Time domain records to WAV file format on demand with selectable bandwidth<br>and recording period | |
| Remote System Check | Real-time system check and Built-in sound source producing level of 100 dB at 1 kHz | |
| Memory | 8 GB (non-removable) | |
| Display and Keyboard | OLED colour display 96 x 96 px and 4 push-button keyboard | |
| Communication Interfaces | USB, UART | |
| Ingress Protection Rating | IP 65 | |
| Power Supply | Li-Ion rechargeable battery<br>Operation time on battery<br>External DC source USB-C | (non-removable)<br>up to 8h<br>5 V, 1A |
| Environmental Conditions | Temperature<br>Humidity | from -20 °C to 60 °C<br>up to 95 % RH, non-condensed |
| Dimensions | 600 mm length; 66 mm diameter excluding windscreen (windscreen diameter 130 mm) | |
| Weight | Approx. 1.2 kg | |

The policy of our company is to continually innovate and develop our products.
Therefore, we reserve the right to change the specifications without prior notice.

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