SV 200A
All in One
Noise Monitoring Station

SV 200A noise monitoring station is the top-of-the range station with built-in microphones for noise directivity detection. This revolutionary solution enables identification of dominant noise sources providing information about their location both in vertical and horizontal directions. In practice, the measurement of directionality gives the opportunity to indicate the dominant source of noise in the area of measurement or to exclude unwanted events.

SV 200A
Noise Monitoring Station

class 1.

All in One

Measure and record
noise, spectra, audio, meteo

The SV 200A noise monitoring station is an all-in-one instrument which means that the sound level meter has been integrated with a 4G modem and outdoor enclosure. The station has been equipped with a various options for connection including 4G, LAN, Wireless LAN and Bluetooth®. Station can perform a real-time frequency analysis in 1/1 and 1/3 octave bands and save it as time-history data. Additionally it can record the audio signal for noise sources recognition and data recalculation.

Noise Directivity

Built-in microphones
for noise directivity detection

Four additional microphones located on sides of the housing use the sound intensity technique to detect the direction of a dominant noise source both in the vertical and horizontal axes. The Leq distribution in angle sectors is saved as the time-history and can be used for data filtering and reporting.

Outdoor Monitoring

Low powering and smart
solutions in a waterproof housing

The SV 200A has an internal Li-Ion battery and interface for direct solar panels connection. The wheaterproof housing protects the SV200A Noise monitoring station against extreme weather conditions while fulfilling class 1 accuracy. The accurate GPS module, provides information on the localization as well as measurement time synchronization.

SVANTEK

Key Functions

Class 1 accuracy

The weatherproof housing protects the SV 200A noise monitoring station against extreme weather conditions while fulfilling class 1 accuracy.
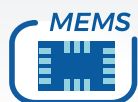
Additional side directional microphones

Four additional microphones located on sides of the housing use the sound intensity technique to detect the direction of a dominant noise source both in the vertical and horizontal axes. The Leq distribution in angle sectors is saved as the time-history and can be used for data filtering and reporting.

Frequency analysis & audio signal recording

Station can perform a real-time frequency analysis in 1/1 and 1/3 octave bands and save it as time-history data. Additionally it can record the audio signal for noise sources recognition and data recalculation.

Advanced alarms

The advanced alarms function can send e-mail and SMS notifications triggered by threshold level conditions combined with time conditions. Station's status alarms are also available.

Multiple connectivity

The 4G modem, WLAN and LAN provide fast data transfer over the Internet to PC with standard Internet connectivity. SvanNET enables a plug & play connection to Internet and easy management of measurement projects. Regardless of the SIM card type, Public or Private, SvanNET will establish connection, giving full access to the measurement data via web browser. The Bluetooh® and Wireless LAN provide access point for an easy configuration with the SvanNET application.

Remote system check

Following ISO 1996-2 requirements, the SV 200A is using the electrostatic actuator to perform the periodic system check. Checking of the complete measurement chain including the microphone is the advantage of using electrostatic actuator method.

PC Software

SvanNET enables a plug & play connection to the Internet and easy management of measurement projects. Regardless of the SIM card type, Public or Private, SvanNET will establish connection, giving full access to the measurement data via web browser.

SvanPC++ is a PC software supporting functions such as measurement data downloading from instruments to PC, measurement setups creation, basic Leq/RMS recalculation, measurement results in text, table and graphical form of presentation, export data to a spread sheet or text editor applications.

Optional accessories
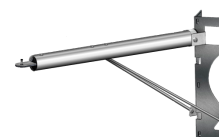

SP 276
METEO Station

SB 276
Solar Panel

SP 200A
LAN Adapter

SV 36
Class 1 Sound Calibrator
94 dB/114 dB

SP 272A
Alarm Lamp with Buzzer

SA 306
Pole Mounting Bracket

SVANNET_1A
SvanNET Projects Subscription
1 year - 1 station

SVANNET_5A
SvanNET Projects Subscription
1 year - 5 station

SV 200A – Noise Monitoring Station

 SVANTEK

Technical specification

Standards	Class 1: IEC 61672-1:2013, Class 1: IEC 61260-1:2014
Weighting Filters	A, B, C, Z
Time Constants	Slow, Fast, Impulse
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB
Microphone	Microtech Gefell MK 255, 50 mV/Pa, prepolarised 1/2" condenser microphone
Preamplifier	Integrated
Linear Operating Range	25 dBA RMS ÷ 133 dBA Peak (in accordance to IEC 61672)
Dynamic Measurement Range	15 dBA RMS ÷ 133 dBA Peak (typical from noise floor to the maximum level)
Internal Noise Level	Less than 15 dBA RMS
Frequency Range	3.5 Hz ÷ 20 kHz
Meter Mode Results	Elapsed time, Lxy (SPL), Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), Lxye (SEL), 2 x LR (ROLLING LEQ), 2 x LE (ESTIMATED LEQ), L_n (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5
Measurement Profiles	Simultaneous measurement in three profiles with independent set of filters (x) and detectors (y)
Statistics	L_n (L_1-L_{99}), complete histogram in meter mode and 1/1 & 1/3 octave analysis
Data Logger	Logging of summary results, spectra distribution and its statistics, weather data with logging step down to 1 s and time history of selected parameters with short logging step down to 20 ms
1/1 Octave Analysis[1]	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 4 Hz to 16 kHz
1/3 Octave Analysis[1]	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 4 Hz to 20 kHz
Noise Directivity[1]	Maximum noise energy directivity measurements in both azimuth and altitude directions including noise energy distribution diagram
Audio Recording[1]	Time domain records to WAV file format on demand with selectable bandwidth and recording period
Remote System Check	Built-in electrostatic actuator, triggered manually or in automated mode
GPS	Time synchronization and localization
Memory	64 GB (non-removable)
Display and Keyboard	1.1" OLED display and 5 push-buttons keyboard
Communication Interfaces	USB, RS 232, UART (TTL), LAN, Bluetooth®, 4G modem, WLAN
Ingress Protection Rating	IP 54 (significant protection from dust, protection from rain, spraying and splashing)
Power Supply	Li-Ion rechargeable battery (non-removable) Operation time on battery (10.8 V / 6.7 Ah) Modem off — up to 7 days Modem on — up to 4 days[2] Solar Panel (not included) — MPPT voltage 15.0 V ÷ 20.0 V AC power supply (included) — Input 100 ÷ 240 VAC output +15 VDC 2.67 A, IP 67 housing External DC source (not included) — voltage range 10.5 V ÷ 24 V e.g. 12 V or 24 V accumulator[3]
Environmental Conditions	Temperature — from -30 °C to 70 °C[4] Humidity — up to 99 % RH, non-condensed
Dimensions	860 mm length; 70 mm diameter excluding windscreen (windscreen diameter 130 mm)
Weight	Approx. 3.2 kg

[1] function operates together with sound level meter mode

[2] meter mode, time history logging step 1 second, GSM modem transmission 10 % of the measurement time

[3] 15 V required for internal battery charging

[4] only with external powering

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.

SOUND AND VIBRATION MEASUREMENT SOLUTIONS