

# SV 200

## All In One Noise Monitoring System

SV 200 is a fully integrated solution for unattended noise monitoring applications featuring an internal web server for system configuration, live data streaming, data management and battery powered operation providing true flexibility for both short and long term measurements. The measurement capabilities of the SV200 are optimized for noise monitoring applications. It measures and stores results suitable for automatic reports, detailed information for advanced post-processing analysis and streams live data stream for real time noise monitoring. Standard measurement functionality includes multi-profile data logging, real time 1/1 and 1/3-octave logging, audio event recording and statistical analysis. Measuring capabilities can be extended with real time audio streaming and weather condition monitoring. SV 200 can be used for both 0° and 90° reference direction, typically used for aircraft and environmental noise. The reference direction is user selectable in the instrument configuration.

The weatherproof housing protects SV 200 noise monitoring station against extreme weather conditions while fulfilling class 1 accuracy. Special attention was given to the highly efficient windscreen which reduces noise, even at high wind speeds. Internal heating and rugged a dual layer housing enables the SV 200 to operate from -30°C up to +50°C and humidity up to 100% RH. SV 200 has a 2,9 Ah internal Li-Ion battery and interface for connecting solar panels.

A waterproof mains adapter for charging the battery and powering the station is also included. The system is specially designed for easy installation - SV 200 is small, light weight and easy to install by a single person.

The SV 200 is available with an integrated low power 3G modem or Wi-Fi access point. The implementation of advanced and highly reliable communication protocol gives the user full control of the station, offers easy to use data transmission, real time data publication and live audio streaming. Station configuration and data management is done by using a web browser or the SvanPC++ RC server application.

### FEATURES

- 'All in one' design for portable, mobile and permanent noise monitoring installations
- Real-time 1/1 or 1/3 octave analysis
- Audio events recording
- Rugged housing protecting the system against harsh environmental conditions (IP66)
- Integrated electrostatic actuator for full system verification
- Class 1 according to IEC 61672
- Integrated high speed 3G or Wi-Fi modem
- Automatic time synchronization
- Large windscreen against high-speed wind
- Intelligent heater protecting microphone against humidity
- Live audio & data streaming capabilities
- Low power consumption, integrated Li-Ion battery and direct connection for solar panels
- Highly reliable and secure data push and configuration pull communication protocol
- Both, server and web based system configuration
- Community & airport characteristics available simultaneously



# TECHNICAL SPECIFICATIONS

## SOUND LEVEL METER

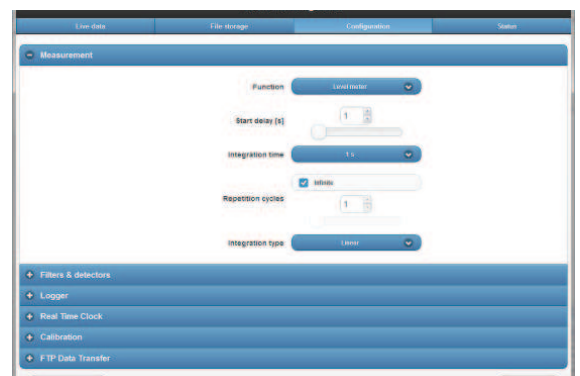
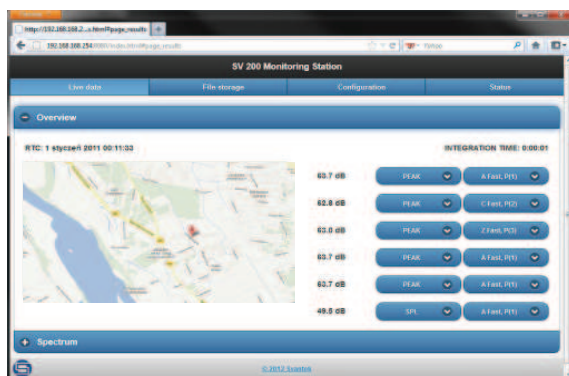
Standards	Class 1: IEC 61672-1:2002, Type 1: IEC 61260:2002
Weighting Filters	A, C, Z
Time constants:	Slow, Fast, Impulse
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB
Microphone	Microtech Gefell MK 250, 50 mV/Pa, prepolarised 1/2" condenser microphone
Preamplifier	Integrated
Linear operating range	25 dBA RMS ÷ 133 dBA Peak (in accordance to IEC 61672)
Total 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
Dynamic Range	115 dB
Frequency Range	3.5 Hz ÷ 20 kHz
Meter Mode Results	SPL, Leq, SEL, Lden, Ltm3, Ltm5, LMax, LMin, LPeak
Statistics	Simultaneous measurement in three profiles with independent set of filters and detectors Ln (L1-L99), complete histogram in meter mode and 1/1 & 1/3 octave analysis Simultaneous measurement in three profiles with independent set of filters and detectors
1/1 Octave Analysis	Real-time analysis meeting type 1 requirements of IEC 61260 (3.15 Hz ÷ 20 kHz)
1/3 Octave Analysis	Real-time analysis meeting type 1 requirements of IEC 61260 (3.15 Hz ÷ 20 kHz)
Data Logger	Logging of summary results, spectra and weather data with logging step down to 1 second and time history of selected parameters with short logging step down to 2 millisecond
Audio Events Recording	Time domain records to wav file format on demand with selectable bandwidth and recording period
Audio Streaming (option)	On-line transmission of audio signal over Internet (under development)

## BASIC DATA

Ingress Protection Rating	IP 66
Inputs	Power supply LEMO 3-pin, extended I/O port LEMO 9-pin
Remote Calibration	Built-in electrostatic actuator, triggered manually or in automated mode
Memory	Micro SD card 16 GB (non-removable)
Display & Keyboard	External 1.1" OLED colour display (option)
Communication interfaces	USB / Serial port (RS 232 with optional cable) 3G modem (included in SV 200_3G) Wi-Fi / LAN module (included in SV 200_WiFi) External trigger input 0-30V with pull-up 47kOhm at 3.3V
Power Supply	Li-Ion rechargeable battery (non-removable) operation time > 48 hours (14.4 V / 2.9 Ah) <sup>1</sup> Solar Panel (not included) MPPT voltage 17.0 V ÷ 20.0 V AC power supply (included) – Input 100-240VAC, output +24VDC 2.5A, IP66 housing External DC source (not included) – voltage range 10.5V – 24V, e.g. 12V or 24V accumulator
Environmental Conditions	Temperature from -30° C <sup>2</sup> to 50° C Humidity up to 100 % RH
Physical Characteristics	Dimensions 700 mm length 70 mm diameter excluding windscreen (windscreen diameter 130 mm) Weight Approx. 2.3 kg with batteries

<sup>1</sup> Meter mode, time history logging step 1 second, 3G modem transmission 10 % of the measurement time

<sup>2</sup> Only with external powering



Continuous product development and innovation are the policy of our company. Therefore, we reserve the right to change the specifications without prior notice.



SVANTEK Sp. z o. o.  
ul. Strzygłowska 81  
04-872 WARSAW, POLAND  
phone/fax (+48) 22 51 88 320, (+48) 22 51 88 312  
http://www.svantek.com e-mail: office@svantek.com.pl



DISTRIBUTOR: