SVANTEK
monitoring systems

SV 307A

Class 1
Noise Monitoring Station



The SV 307A is a new version of the best-selling monitoring station, which has been equipped with the latest microphone in MEMS technology with a patented dual remote system that checks the correctness of the measurement path. An additional advantage of this solution is the indefinite manufacturer's warranty for the microphone.

The SV 307A uses the built-in 4G modem to send SMS and email alarms and to send measurement data to the SvanNET website where users can view the results and configuration settings.



SV 307A

Noise Monitoring Station

New all-in-one hardware

New microphone
faster data transfer

The new version of the SV 307A has an improved external housing for operation in conditions of high sunlight exposure and low temperatures, a high-speed 4G modem and a unique microphone in the MEMS technology. The all-in-one hardware also includes a large internal battery that can power the system for 5 days with a modem turned on.

Patented system check

Dual and remote
measurement validation

The patented system check uses MEMS microphones located very close to each other. In case the levels measured by the reference microphone and the measurement microphones differ by more than a particular threshold, the SV 307A system check triggers an alarm. Additionally, an inbuilt sound source producing level of approx. 100 dBA at 1 kHz can be used for manual or automated system check.

Noise, meteo, dust

Smart monitoring and
advanced triggering

The instrument is designed to monitor noise levels and their spectra, record and audio signal and GPS localization. All meteorological values such as wind speed, wind direction, rain, humidity etc. or dust particles PM2.5 or PM10 can be stored together with the noise data when external sensors are connected.

Key Functions

Class 1 accuracy and precission

The SV 307A is a new class 1 noise monitoring station designed for permanent noise monitoring. With the improved housing, the SV 307A has the superior acousitics characteristics.

Life-time warranty on microphone

The SV 307A is equipped with a state-of-the-art MEMS microphone with a life-time warranty.

Real-time frequency analysis

The 1/3 octave function allows the determination of the influence of high or low frequencies on overall values. Functions can be activated at any time by ordering the activation code.

Triggered audio recording

Audio recording is synchronized with a noise time-history and it can be opened and played back in PC software enabling noise source recognition. Audio recording can be triggered on threshold or time. It can be activated at any time by ordering the activation code.

Audio streaming live listening

The SV 307A is capable of streaming the live audio to the SvanNET. The function works independently of the wav audio recording and can be activated as the SvanNET license.

GPS localisation and synchronization

The accurate GPS module provides information on the localization as well as measurement time synchronization.

Low power consumption

Low power consumption is the key functionality when it comes to permanent noise monitoring. It means lower cost of running the system as well as longer time of battery operation - up to 5 days with modem transmission.

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
Weather Station



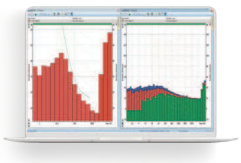
SB 371
Solar Panel



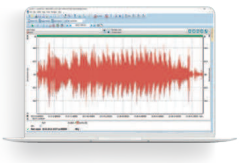
SB 275
External 33 Ah Battery



SV 36
Class 1 Sound Calibrator
94 dB/114 dB



SF 307_3
License of 1/1 & 1/3 octave



SF 307_15
License of audio recording

SVANNET_1A
SvanNET Projects subscription – 1 year

SVANNET_LISTENING_A
On-line audio listening subscription– 1 year

Technical Specifications

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 30A in 1/2" housing	
Preamplifier	Integrated	
Linear Operating Range	30 dBA RMS ÷ 128 dBA Peak (in accordance to IEC 61672)	
Dynamic Measurement Range	23 dBA RMS ÷ 128 dBA Peak (typical from noise floor to the maximum level)	
Internal Noise Level	Less than 23 dBA RMS	
Dynamic Range	>100 dB	
Frequency Range	20 Hz ÷ 20 kHz	
Meter Mode Results	Elapsed time, Lxy, Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), LxyE (SEL), 2 x LR (ROLLING LEQ),10 x LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5, GPS coordinates	
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 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, centre frequencies from 31.5 Hz to 16 kHz	
1/3 Octave Analysis (option)	Real-time analysis meeting Class 1 requirements of IEC 61260, centre frequencies from 20 Hz to 20 kHz	
Audio Recording (option)	Time domain records to wav file format on demand with selectable bandwidth and recording period	
Remote System Check	Real-time system check and Built-in sound source producing level of approx. 100 dB at 1 kHz	
GPS	Time synchronization and localization	
Memory	MicroSD card 32 GB (removable & upgradeable up to 128 GB)	
Display and Keyboard	OLED colour display 128 x 160 px and 10 push-button keyboard	
Communication Interfaces	USB 2.0 4G modem RS 232 for meteo module or dust monitor	
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 (7.2 V / 10 Ah): Modem off Modem on Solar Panel (not included) AC power supply (included) External DC source (not included)	 up to 6 days up to 5 days (depends on modem usage) MPPT voltage 17.0 V ÷ 20.0 V Input 100 ÷ 240 VAC output +15 VDC 2.5 A, IP 67 housing voltage range 10.5 V ÷ 24 V e.g. 12 V or 24 V accumulator
Environmental Conditions	Temperature Humidity	from -20 °C to 60 °C up to 99 % RH, non-condensed
Dimensions	680 mm length; 80 mm diameter excluding windscreen (windscreen diameter 130 mm)	
Weight	Approx. 2.2 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.

SVANTEK Sp. z o. o.
Strzyglowska 81, 04-872 WARSAW, POLAND
phone (+48) 22 51 88 320 | www.svantek.com/contact