SVANTEK
monitoring systems

SV 277 PRO

Class 1
Noise Monitoring Station

SV 277 PRO is an outdoor monitoring system based on the SVAN 977 Class 1 sound level meter. The IP 65-rated case contains a lead-acid battery, the operating time of which can easily be extended by connecting it to an external battery or a solar panel. The monitoring station uses a 4G modem for remote communication to the Internet. SvanNET, a connectivity service, supports the connection between a PC and the station.

SV 277 PRO

Noise Monitoring Station

Noise Monitoring

Class 1 Noise
and Weather Data

Class 1 noise measurements are performed over a very wide dynamic range - over 110 dB from 3 Hz up to 20 kHz. The station supports an optional meteo module for measurement of weather conditions such as wind speed and direction, temperature, humidity, ambient pressure and rainfall. The TIME-HISTORY of results such as Leq, Max, Min and Peak is saved on a 32 GB microSD card.

Sound Level Meter

Hand-Held
Sound and Vibration

The station is based on the SVAN 977 which can be easily removed from the case and used as a hand-held sound or vibration level meter. The SVAN 977 offers options for time domain signal recording, frequency analysis and ultrasounds and can be used for variety of applications such as occupational noise, building acoustics or engineering noise and vibration measurements.

Remote Access

Remote
Data Transmission

The 4G modem provides data transfer over the Internet to SvanNET with standard Internet connectivity. SvanNET is an advanced server solution supporting remote connection with SV 277 PRO. The connection over the SvanNET allows users to use a web browser to watch real time measurement results, download files and reconfigure the station.

Key Functions

Class 1 accuracy and precission

Class 1 noise measurements are performed over a very wide dynamic range - over 110 dB from 3 Hz up to 20 kHz.

Outdoor monitoring system

Portable monitoring system housed in a waterproof case dedicated for periodic outdoor measurements. Military standard connectors provide reliable, robust and waterproof cable connections.

Smart powering solutions

The IP 65-rated case contains a lead-acid battery, the operating time of which can easily be extended by connecting it to an external battery or a solar panel. The intelligent charging unit enables the use of a solar panel without expensive controllers or heavy batteries.

Real-time frequency analysis

The station can perform real-time frequency analysis in 1/1 or 1/3 octave bands and save it as time-history data. The 1/1 and 1/3 octave bands are installed in the device.

Triggered audio recording

Audio recording is synchronised 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 by threshold or by time. It can be activated at any time by ordering the activation code.

Advanced data logging

The time history of results such as Leq, Max, Min and Peak with two simultaneous logging steps is saved on a 32 GB memory card.

3-year warranty

Each SV 277 PRO kit is supplied with its factory calibration certificate and 36-month warranty card.

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 a PC, measurement setups creation, basic Leq/RMS recalculation, measurement results in text, table and graphical presentation forms, export of data to a spread sheet and text editor applications.

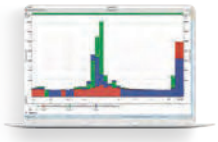
Optional accessories

SP 276
Weather Station

SB 371
Solar Panel

SB 272
External Battery
33 Ah

SV 36
Class 1 Sound Calibrator
94 dB/114 dB



SF 277_2
License of 1/3 octave

SF 277_15
License of audio recording

SVANNET_1A
SvanNET Projects subscription – 1 year

SvanPC++ EM
Post-processing software

Technical Specifications

Standards	Class 1: IEC 61672-1:2013, Class 1: IEC 61260-1:2014
Weighting Filters	A, C, Z, B, LF, U, AU
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 SA 277 outdoor protection kit (IP 65) with SC 277 extension cable
Preamplifier	SV 12L
Linear Operating Range	23 dBA RMS ÷ 140 dBA Peak (in accordance to IEC 61672)
Dynamic Measurement Range	16 dBA RMS ÷ 140 dBA Peak (typical from noise floor to the maximum level)
Internal Noise Level	Less than 16 dBA RMS
Dynamic Range	>110 dB
Frequency Range	3 Hz ÷ 20 kHz
Meter Mode Results	Elapsed time, Lxy, Leqx (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), LR (ROLLING LEQ), Ovl (OVERLOAD), Lxye (SEL), 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 and 1/1 & 1/3 octave analysis
Data Logger	Time-history logging with two adjustable logging steps down to 2 milliseconds
Analyser	1/1 octave (included) or 1/3 octave real-time analysis (included), up to 40.0 kHz band meeting Class 1: IEC 61260-1 FFT analysis 1600 lines, up to 40.0 kHz band (option) RPM rotation speed measurement parallel to the vibration measurement (option) RT 60 reverberation time measurement (option)
Audio Recording	Time domain signal recording to WAV signal, continuous or triggered (option) Sampling rate: 12/24/48 kHz with 24-bit resolution
Memory	MicroSD card 32 GB (removable & upgradeable up to 128 GB)
Communication Interfaces	USB 2.0 4G modem RS 232 for meteo module
Power Supply	Waterproof DC power supply 15 V , 60 WATT (acceptable voltage range 11 V ÷ 30 V) Internal battery 17 Ah / 12 V Secondary external battery 33 Ah / 12 V (option) Solar panel (option)
Operating Time on Battery	4 days with continuous modem transmission[1] 8 days with modem switched off[1] Test Conditions: meter mode, display dimmed, 2 ms time-history logger, continuous event recording
Environmental Conditions	Temperature: from -10 °C to 50 °C Humidity: up to 95 % RH, non-condensed
Dimensions	305 x 270 x 194 mm (without cables)
Weight	Approximately 9 kg including battery

[1] depending on configuration and environmental conditions

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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