

# SV271 *lite* Noise Monitoring Station



INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

# SV271 *lite* Noise Monitoring Station

## Features

SV 271 LITE is a portable monitoring system housed in a waterproof case dedicated for periodic **OUTDOOR** measurements.

The station is based on **SVAN 971** which can be easily removed from the case and used as a hand-held sound level meter.

SVAN 971 is a Class 1 **TYPE APPROVED** sound level meter in accordance with IEC 61672-1 standard.

The **TIME-HISTORY** of results such as Leq, Max, Min and Peak with two simultaneous logging steps is saved on a 8 GB microSD card (upgradeable up to 128 GB).



The light-weight microphone protection kit gives an easy access for calibration with an acoustic calibrator. Once the calibration signal is detected, the system starts the **AUTO-CALIBRATION**.

The **LARGE WINDSCREEN** is highly efficient in reduction of a wind noise effects even at high wind speeds.

Military standard **CONNECTORS** provide reliable, robust and waterproof cable connections.

Station uses waterproof **CHARGER** that is designed for outdoor use.

Station can be powered from, internal battery or external DC power supply and is ready for direct connection of a **SOLAR PANEL**. The powering is managed by the intelligent charging unit.



Noise Emission Monitoring



Wind-farms Noise Monitoring



Community Noise Monitoring

## About

**SV271 LITE** is an outdoor monitoring system based on type-approved SVAN971 Class 1 sound level meter. The IP 65-rated case contains a lead-acid battery which operating life can be easily extended by connecting an external battery or a solar panel. The intelligent charging unit enables use of a solar panel without expensive controllers or heavy batteries. The case is fitted with very robust, waterproof connectors (military standard) and is supplied with an IP 65 external power supply. The light-weight microphone protection kit can be easily installed on a mast with standard mounting threads. All accessories fit conveniently into a second carrying case.

The system provides broad-band results such as Leq, Max, Min and Peak with all standard weighting filters together with an incredible time-history logging feature with two adjustable logging steps. The broad-band results can be recorded in three acoustic profiles which enable measurements to be taken with 3 different filters (e.g. A, C, Z) as well as 3 different detector time constants (e.g. Fast, Slow, Impulse). The SVAN 971 can be easily removed from the case and used as hand-held sound level meter.

## What's inside?



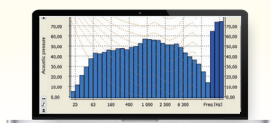
The SV271 LITE kit consists of two carrying cases. The main unit is a waterproof carrying case with internal 17 Ah battery and internal charging unit supporting powering from external DC or solar panel. The SVAN971 Class 1 sound level meter is installed inside. The outdoor charger and outdoor microphone kit are packed inside the second transportation case. The kit includes license for SvanPC++ software and has its factory calibration certificate and **36 MONTHS WARRANTY CARD**.

## Software



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

## Optional functions



The option for **1/1 OR 1/3 OCTAVE REAL-TIME ANALYSIS** allows the analysis of the noise frequency contents. It can be activated at any time by entering an activation code.



The option of **EVENT RECORDING** works during measurement and is logged in parallel to time history. Once downloaded to PC it can be played back. Settings such as triggers or recording time are adjustable. It can be activated at any time by entering an activation code.

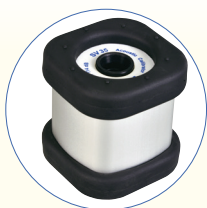


**SvanPC++ Environmental Monitoring** is designed for post-processing of data recorded by monitoring station. The module offers a powerful calculator and an automated noise event finder for noise source identification. Thanks to its "Projects" functionality, SvanPC++\_EM allows to combine and compare data from multiple measurements as well as create and save reports in MS Word™ templates. The module can be activated at any time by entering the activation code.

## Optional Accessories



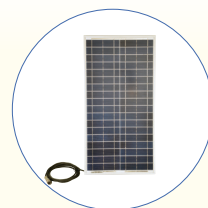
SA206  
Mast for Microphone  
Protection Kit



SV35  
Class 1 Acoustic  
Calibrator  
94 dB / 114 dB at 1 kHz



SB270\_EB  
External Battery  
to Monitoring  
Station 33Ah



SB270\_SP  
Solar Panel to  
Monitoring Station

# Technical Specifications



## SVAN 971 Sound Level Meter & Analyser

Standards	Class 1: IEC 61672-1:2002
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	ACO 7052E, 35 mV/Pa, prepolarised 1/2" condenser microphone
Preamplifier	SV 18 detachable
Linear Operating Range	25 dBA RMS ÷ 140 dBA Peak (in accordance to IEC 61672)
Total Dynamic Measurement Range	15 dBA RMS ÷ 140 dBA Peak (typical from noise floor to the maximum level)
Internal Noise Level	less than 15 dBA RMS
Dynamic Range	>110 dB
Frequency Range	10 Hz ÷ 20 kHz
Meter Mode Results	Elapsed time, Lxy (SPL), Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), LR (ROLLING LEQ OPTION), Ovl (OVERLOAD), Lxye (SEL), LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5
Statistics	Simultaneous measurement in three profiles with independent set of filters (x) and detectors (y)
Audio Recording (option)	Ln (L1-L99), complete histogram in meter mode
Audio Recording (option)	Audio events recording, trigger and continuous mode, 12 kHz sampling rate, wav format
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
Data Logger	Time-history logging of summary results, spectra with adjustable double logging steps down to 100 ms
Memory	MicroSD card 8 GB (removable & upgradeable up to 128 GB)

## SV 271 LITE Noise Monitoring Station

Power Supply	DC power supply / charger 11 V ÷ 30 V (waterproof) Internal battery 17 Ah / 12 V Secondary external battery 33 Ah / 12 V (optional) Solar panel (optional)
Operating time on battery	Up to 21 days Test Conditions: meter mode, display dimmed, 100 ms time-history logger, continuous event recording
Microphone protection kit	SA 271 outdoor protection kit (IP 65)
Environmental Conditions	Temperature -10 °C ÷ +50 °C
Dimensions	300 x 260 x 190 mm (without antenna and cables)
Weight	Approximately 9 kg including battery

Our Company's policy is based upon continuous product development and innovation. Therefore, we reserve the right to change the specifications without any prior notice whatsoever.



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