

SV279 *pro* Noise Monitoring Station



INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS

SV279^{pro} Noise Monitoring Station

Features

SV279 PRO is a portable monitoring station housed in a waterproof case dedicated for periodic **OUTDOOR** measurements.

The system is based on **SVAN 979** which can be easily removed from the case and used as a hand-held sound level meter.

SVAN979 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 8 GB microSD card (upgradeable to 128 GB).

Station can perform a real-time frequency analysis in **1/3 OCTAVE** bands and save it as time-history data.

The **AUDIO RECORDING** works during measurement and is logged as a WAV file in parallel to the time-history, so it can be played back in the PC software. Settings such as triggers or recording time are adjustable.

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

The **3G MODEM** provides fast data transfer over the Internet to PC with standard Internet connectivity.

Once you insert SIM card the remote communication settings are automatically adjusted to connect to **SvanNET**.

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

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

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



About

SV279 PRO is an outdoor monitoring system based on SVAN 979 Class 1 sound level meter. The IP 65-rated case contains a lead-acid battery which operating time can be easily extended by connecting an external battery or solar panel. The intelligent charging unit enables use of a solar panel without expensive controllers and 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 outdoor microphone 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 979 can be easily removed from the case and used as a hand-held sound level meter.

The monitoring station uses the 3G modem for the remote communication with Internet. SvanNET, the relay server, supports the connection between PC and station.

The SvanNET allows the usage of the system with all types of SIM cards, regardless if they have public or private IP. Additionally, it gives an access to a status of monitoring stations over a mobile phone or tablet.

What's inside?



The SV279 PRO kit consists of two carrying cases. The main unit is a waterproof carrying case with internal 17 Ah battery and a charging unit supporting powering from an external DC or solar panel. The SVAN979, Class 1 sound level meter with options for frequency analysis and audio recording is installed inside the main unit.

The outdoor power supply and outdoor protection kit for microphone are packed inside the second transportation case. The kit includes license for SvanPC++ software and SvanNET base account. Each kit has its factory calibration certificate and **36 MONTHS WARRANTY CARD**.

Software



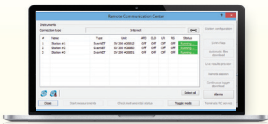
SvanNET is a relay server supporting connection between PC and SV279 PRO and allows usage of all types of SIM cards with the SV279 modem regardless if they have public or private IP. The SvanNET provides a web interface that allows to watch real-time measurement results on a PC or mobile device, manually download files, reconfigure the station and check its status.



SvanPC++ is a PC software supporting 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 a spread sheet or text editor applications.

New version of SvanPC++ software also supports analysis of wave files from Svantek instruments (for example calculation of tonality).

Optional Functions



SvanPC++ Remote Communication software package offers advanced features such as automatic data download, CSV and HTML data publishing as well as FTP upload.

The SvanPC++_RC module supports configuration of the monitoring station as well as configuration of advanced alarms that combine triggers based on time with noise thresholds. It can be activated at any time by entering the 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. It can be activated at any time by entering the activation code.

Optional Accessories



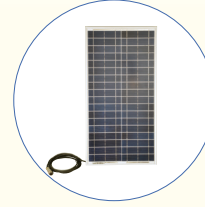
SA 206
Mast to
Microphone
Protection Kit



SV 35A Class 1
Acoustic Calibrator
94 dB / 114 dB
at 1 kHz



SB 270_EB
External Battery 33 Ah
to Monitoring Station



SB 270_SP
Solar Panel to
Monitoring Station

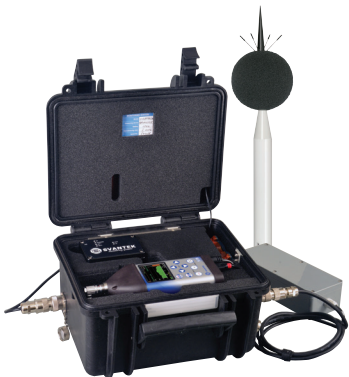
Technical Specifications

SVAN979 Sound Level Meter & Analyser



Standards	Class 1: IEC 61672-1:2013 (PTB approval 21.21/13.06)
Meter Mode	Elapsed time, Lxy (SPL), Lxeq (LEQ), Lxpeak (PEAK), Lxymax (MAX), Lxymin (MIN), Ovl (OVERLOAD %), Lxye (SEL), LN (LEQ STATISTICS), Lden, LEPd, Ltm3, Ltm5 Simultaneous measurement in three profiles with independent set of filters (x) and detectors (y)
Analyser	1/1 or 1/3 octave real-time analysis Pure tone detection meeting ISO 1996-2 (Tonality option) User programmable second order band pass filters (optional)
Audio Recording	Time domain signal recording to WAV signal, continuous or triggered Sampling rate: 12/24/48 kHz with 24-bit resolution
Weighting Filters	A, C, Z, B, G
RMS Detector	Digital true RMS detector with peak detection, resolution 0.1 dB
Detector Time Constants	Slow, Fast, Impulse
Microphone	GRAS 40AE, 50 mV/Pa, prepolarised 1/2" condenser microphone
Preamplifier	SV 17 Voltage type (supports 200 V polarisation)
Linear Operating Range	22 dBA RMS ÷ 140 dBA Peak (in accordance to IEC 61672)
Dynamic Measurement Range	12 dBA RMS ÷ 140 dBA Peak (typical from noise floor to the maximum level)
Internal Noise Level	less than 12 dBA RMS
Frequency Range	3.15 Hz ÷ 20 kHz, with GRAS 40AE microphone
Data Logger	Time-history logging with two adjustable logging steps down to 2 milliseconds
Memory	microSD 8 GB (removable and upgradeable to 128 GB)

SV279 PRO Monitoring Station



Remote Communication	3G modem
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	4 days with continuous modem transmission 8 days with modem switched off Test Conditions: meter mode, display dimmed, 2 ms time-history logger, continuous event recording
Microphone protection kit	SA 279 outdoor protection kit (IP 65)
Environmental Conditions	Temperature -10 °C ÷ +50 °C
Dimensions	420 x 340 x 210 mm (without antenna and cables)
Weight	Approximately 9 kg including battery

Main Applications



Traffic Noise Monitoring



Noise Emission Monitoring



Community Noise Monitoring

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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