

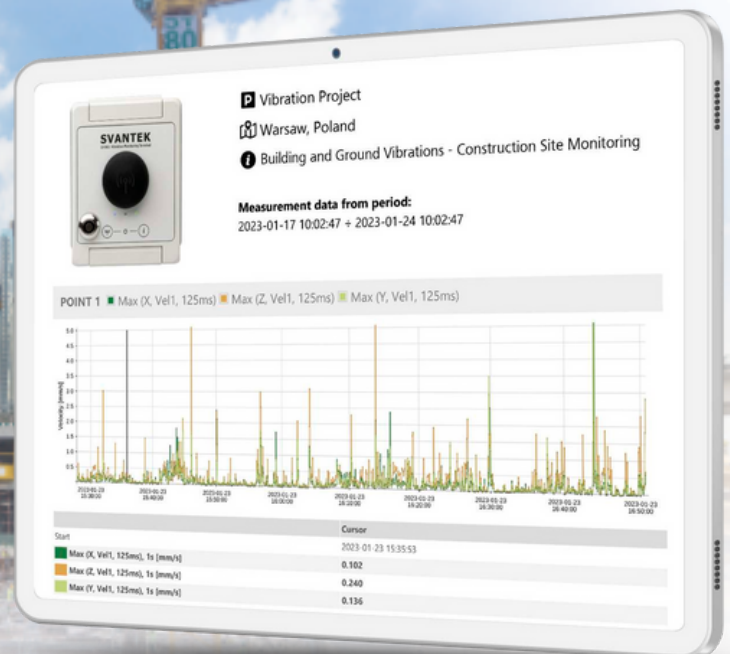
# SV 803

## Vibration Monitoring Station



The SV 803 has been developed for both short- and long-term monitoring applications. It measures triaxial velocity and calculates Peak Particle Velocity and Dominant Frequency values simultaneously. In addition to logging overall values and frequency spectra, the time domain signal is stored for post processing purposes.

FFT is used for dominant frequency determination according to BS and DIN standards. Alternatively, the RMS or PEAK velocity spectrum in 1/3 octave bands can be used for comparison with user curves. The vibration monitoring terminal features a battery life of up to 6 months and, when connected to a solar panel, it can sustain ongoing operation.





# SV 803

## Vibration Monitoring Station



### Building Vibration

Compliant with DIN 4150-3 and BS 7385-2

The choice of Building Vibration Standard and the type of building (curve) enables the vibration velocity measurements according with commonly used standards such as DIN 4150-3 or BS 7385-2 that use Peak Particle Velocity and Dominant Frequency method.



### Dust & Meteo

Integrate a Weather Station and Dust Meter

Integrate the SP 276 weather station or the SP 280 dust monitor using the optional SD 310 monitoring system controller. The vibration monitoring data as well as meteo and dust will be integrated within SvanNET Projects accessible on-line.



### Mobile Application

Access the SV 803 on iPhone, Android or PC

Bluetooth connection gives full control of the system using any web browsing device like a mobile phone, tablet. The mobile application allows you to control the measurement (start / stop), configure measurement parameters, and view the measurement results.

## Key Features



### Triaxial Vibration Monitoring

SV 803 is a portable monitoring system secured in a waterproof housing, dedicated for periodic and long-term outdoor measurements. The system uses three geophones that can be easily taken out for a calibration.



### PPV Vector

Peak Particle Velocity (PPV) and PPV Vector Sum are measured simultaneously in THREE AXES and logged in the time history.



### KB and VDV

Station is fully configurable to measurement of human vibration in buildings in accordance DIN 4150-2 and BS 6472-1.



### Long Battery Life and Solar Panel Powering

One of the biggest advantages of using the SV 803 is its power efficiency. It can run up to 6 months on batteries. Station can be powered from internal battery or outdoor DC power supply and is ready for direct connection of solar panel.



### Events and Alarms

The 4G GSM modem provides fast data transfer over the Internet to PC with standard Internet connectivity. SMS and E-MAIL alarms can be configured based on vibration or noise levels.



### User Curves in FFT and 1/3 Octaves

If you can't find the vibration standard on the list of implemented ones, you can always input customized values to create a criterion curve based on FFT or 1/3 octave spectrum (RMS, PEAK or MAX).



### Wave Recording

With WAV analysis software you can search for peaks and calculate FFT or 1/3 octave spectrum on selected time periods and calculate various other parameters using the raw WAV signal.

## Optional software



### SvanNET Projects

#### On-line data access

SvanNET Projects is a payable extension offering fully automated management of multi-point noise and vibration monitoring task. Tools such as Automatic Files Download, Data Storage, Advanced Alarms, Data Sharing and Reporting enable unattended monitoring. The functionality of SvanNET Projects allows to group monitoring stations



### SvanPC++

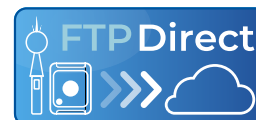
#### Data post-processing

**SvanPC++ Building Vibration Module** is designed for post-processing of data recorded by the monitoring station. The module offers a powerful calculator and an automated event finder in accordance with main building vibration standards. It also enables WAV analysis. The post-processing software comes with the system at no additional cost.



### Assistant PRO Mobile Application

**Assistant Pro App** works both on Android and iOS and is an intuitive and easy way of fully controlling your measurement. The user interface allows the preview of results in the form of time-history plots, spectrum graphs and numerical values. The interface enables the configuration of the instrument, its cloud connection and calibration.



FTP Direct is a ground-breaking and resource saving tool that enables you to connect to environmental systems directly via your own FTP servers.

## Related Products



SvanNET  
Automatic Monitoring Services



SB 871  
Solar Panel



SP 276  
Weather Station



SP 280  
Dust Monitor





## Technical Specifications

Standards	DIN 45699-1:2020-06; ISO 4866:2010, Class 1; IEC 61260:2014, Class 1
Meter Mode	PPV, DF, RMS, RRMS, VDV, MAX, Peak, Peak-Peak, PPV Vector, aw, awv, OVL
Analyser	1/3 octave real-time analysis or FFT analysis, Time domain signal recording to WAV format
Filters	DIN 80, DIN 315, VEL1, KB
RMS Detector	Digital true RMS with Peak detection, resolution 0.1 dB
Detector Time Constants	Fast 125 ms in accordance to DIN 4150-2
Vibration Sensor	Tri-axial geophone
Dynamic Range	1 $\mu\text{m/s RMS}$ ÷ 141 mm/s Peak
Measurement Range	3 $\mu\text{m/s RMS}$ ÷ 100 mm/s RMS (141 mm/s Peak)
Frequency Range	0,8 Hz ÷ 400 Hz (-3 dB)
Remote Communication	4G modem, Bluetooth, GPS
RMS Detector	Internal battery / SB 803 Li-Ion battery pack - 7.2 V, 30.15 Ah, 217 Wh (removable) DC power supply / SB 274 charger (waterproof) External battery pack: Li-Ion (optional) Solar panel (optional)
Operating Time on Battery	up to 1 month with a continuous modem transmission up to 180 days in power saving mode *UNLIMITED with SB 803 and solar panel in power saving mode
Environmental Conditions	Temperature -10 °C ÷ +50 °C
Dimensions	163 x 128 x 115 mm (without accessories)
Weight	Approximately 3,0 kg including battery Approximately 3,5 kg including battery and mounting platform

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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