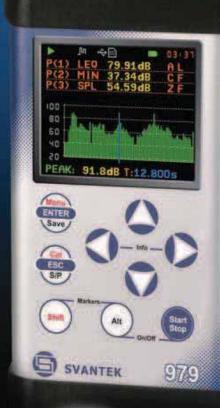
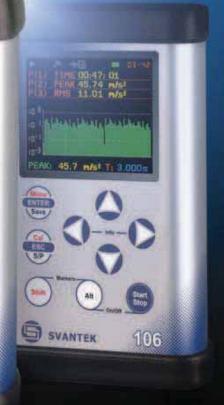
# INSTRUMENTATION FOR SOUND & VIBRATION MEASUREMENTS







SVANTEK

# SVAN 979 Sound & Vibration Analyser

The most advanced and powerful single channel SLM & Vibration Meter ever made

### **FEATURES**

- Extremely powerful Type 1 SLM (IEC 61672:2002) and sound analyser:
  - · multi-profiles sound measurement
  - 1/1 or 1/3 octave analysis
  - audio events and wave file recording
  - · data logging with sophisticated triggering
  - reverberation time measurement
  - pure tone detection
  - loudness analysis
  - FFT
- Powerful vibration meter & analyser:
  - advanced enveloping analysis
  - one or two planes balancing function
- Special functions:
  - signal generator
  - user programmable second order band pass filters
  - acoustic frequency response digitally compensated
  - automatic detection of the windscreen and extension cable
  - self-vibration monitoring
- State of the art hardware design:
  - 110 dB dynamic range
  - dual DSP architecture
  - OLED colour display with smashing brightness and contrast (10000:1)
  - Micro-Flash Card providing huge internal memory (up to 16 GB available now)
  - IEPE, Direct (AC or DC coupling) and 200 V polarisation inputs
  - USB Client and Host ports providing flexible functional extensions (GPRS, Ethernet, WLAN)
  - bluetooth interface
  - RS 232 interface
  - AC output and external trigger input

# SA 203A All Weather Microphone Protection

- Protection of the microphone and preamplifier from environmental conditions
- Type 1, Community and Airport characteristics available simultaneously
- Low cost



# SVAN 959 Sound & Vibration Analyser

### **FEATURES**

- Type 1, IEC 61672:2002 sound level measurements (PTB approval 21.21/0903)
- Intended for professional usage and provided with 1/1, 1/3 octave analysis and time-domain signal recording in a basic set
- General vibration measurements (acceleration, velocity and displacement)
- FFT real-time analysis
- Advanced data logger including spectra logging and audio events recording
- Pure tone detection
- Acoustic loudness measurements
- Reverberation time measurements
- User programmable second order band pass filters
- USB memory stick providing almost unlimited logging capacity
- Built-in signal generator
- Remote communication (GPRS, Ethernet, WLAN)
- All weather microphone protection kit designed for community and airport noise monitoring

# SVAN 957 Sound & Vibration Analyser

- Type 1, IEC 61672:2002 sound level measurements
- Low cost version of SVAN 959 dedicated for general acoustic and vibration measurements, environmental monitoring, occupational health and safety monitoring
- General vibration measurements (acceleration, velocity and displacement)
- 1/1 or 1/3 octave real-time analysis
- FFT real-time analysis
- Time-domain signal recording
- Reverberation time measurements
- USB memory stick providing almost unlimited logging capacity
- Remote communication (GPRS, Ethernet, WLAN)
- Acoustic dosimeter function
- All weather microphone protection kit designed for community and airport noise monitoring



### SVAN 955 Sound Level Meter

### **FEATURES**

- Low cost Type 1, sound level measurements meeting IEC 61672:2002
- Intended to general acoustic measurements, environmental noise monitoring, occupational health and safety monitoring
- Three parallel independent profiles
- Single range in meter mode
- 1/1 real-time octave analysis
- All weather measurements with SA 203 microphone protection kit
- Remote communication (GPRS, Ethernet, WLAN)
- Time-history recording on USB memory stick providing almost unlimited logging capacity

# SVAN 953 SLM & Analyser

- Type 2, sound level measurements meeting IEC 61672:2002
- Excellent choice for general acoustic measurements, environmental noise monitoring, occupational health and safety monitoring in Type 2 accuracy
- Three parallel independent profiles
- 1/1 real-time octave analysis
- FFT real-time analysis
- Remote communication (GPRS, Ethernet, WLAN)
- Time-history recording on USB memory stick providing almost unlimited logging capacity
- Acoustic dose meter



### SV 30A & SV 31 Acoustic Calibrators

### **FEATURES**

- Type 1 sound calibrator meeting IEC 60942 (PTB type approval 21.5/08.05)
- Frequency 1 kHz
- 94 dB (SV 30A) or 114 dB levels (SV 30A, SV 31)
- Calibrated 1/2" and 1/4" (SA 30 adapter) microphones
- 1/2" internal reference condenser microphone
- Microphone presence detection
- Automatic power on/off
- Built-in temperature and static pressure compensation
- Very robust casing





# SVAN 912AE Sound & Vibration Analyser

- Type 1 IEC 61672:2002 sound level measurements
- Unique feature of ultrasound measurements with 1/4" condenser microphone and hydrophones
- Wide measurement band from 0.1 Hz to 90 kHz
- Five parallel independent profiles
- 1/1 or 1/3 octave real-time analysis parallel to the FFT analysis
- FFT real-time analysis
- Very low internal noise level
- Time-domain signal recording
- Large display
- RS 232 and USB interfaces
- Galvanic separation between communication interfaces and measurement path
- Hand held and robust case
- Easy in use





# SVAN 958 Four-Channel Analyser

### **FEATURES**

- Unique instrument on the world market with multiple range of possible applications
- Ideal choice for Human Vibration measurements meeting ISO 8041:2005 including VDV and MTVV
- Triaxial vibration and single channel sound measurement performed at the same time
- Ideal choice for monitoring of construction sites thanks to implemented KB filter

 All four channels flexibly configured, i.e. for acoustic power measurements applications

 Relevant set of accessories dedicated for each application of SVAN 958

Noise measurements Type 1, IEC 61672:2002

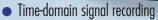
■ 1/1 or 1/3 octave real-time analysis

• FFT real-time analysis

Sound intensity measurements

Reverberation time measurements

FFT cross spectra



 USB memory stick providing almost unlimited logging capacity

#### SV 25

- Type 2 microphone in 1/2" casing dedicated for acoustic dose measurement
- 45 dBA RMS ÷ 141 dB Peak

### SV 60

- Type 1 sound measurement set with 1/2" prepolarised microphone dedicated for SVAN 958
- 24 dBA RMS ÷ 140 dB Peak



### **SV 207**

- Sensitivity 1000 mV/g
- Triaxial accelerometer dedicated for building vibration measurements
- Robust hermetic box with levelling system
- Mounting nails



# SV 106 Six-Channel Human Vibration Meter & Analyser



### **FEATURES**

- Revolutionary six-channel Human Vibration meter & analyser
- Additional two channels for grip force measurements
- Ideal choice for Hand-Arm and Whole- Body vibration measurements meeting ISO 8041:2005
- Capable to perform simultaneous measurements with two triaxial accelerometers (e.g. held in both hands)
- Time-domain signal recording (ISO 2631-5)
- 1/1 or 1/3 octave real-time analysis
- Hand-Arm adapter with triaxial mechanical filter (SA 55)
- Built-in micro flash card

Accessories for Human Vibration Measurements

### **SV 38**

- Low cost triaxial Whole-Body seat accelerometer based on MEMS transducers
- Sensitivity 1000 mV/g
- Dedicated for Human Vibration measurements according to ISO 8041:2005 standard requirements
- Easy usage with SVAN 958 and SV 106
- Connectable to any vibration meter/analyser with IEPE inputs by means of three separate BNC connectors (SC 39S cable)

### **SV 50**

- Triaxial accelerometer for Hand-Arm measurements
- Three mounting adapters
- Dedicated for SVAN 958 and SV 106





# SV 101 Whole Body Vibration Dosimeter & Analyser

#### **FEATURES**

- Complete human vibration meter & analyser integrated with triaxial Whole-Body accelerometer dedicated to measure the standing operators' exposure to vibration
- Built-in operator-presence detection sensor and user interface (display with push-buttons) indicating current instrument state and measurement results
- Whole-Body human vibration measurement in conformance to ISO 8041:2005 and ISO 2631-1, 2 & 5 including VDV and MTVV
- Time-domain signal recording (meeting ISO 2631-5)
- 1/1 and 1/3 octave real-time analysis
- Motion sickness measurements



# SV 100 Whole Body Vibration Dosimeter & Analyser in Seat-pad

- Digital Human Vibration meter & analyser integrated with triaxial Whole-Body accelerometer placed in one seat-pad
- Provided with the driver-presence detection sensor and user interface (display with push-buttons) indicating current instrument state and measurement results
- Ideal choice for the measurements according to ISO 2631 and ISO 8041:2005
- Time-domain signal recording (meeting ISO 2631-5)
- 1/1 and 1/3 octave real-time analysis
- Motion sickness measurements



# SV 102 Dual-Channel Dosimeter, SLM, Analyser

### **FEATURES**

Dual-channel acoustic dosimeter (IEC 61252 and ANSI S1.25-1991)

• Dual-channel Type 2 SLM conforming to IEC 61672

ullet Dual-channel real-time 1/1 or 1/3 octave analysis

■ Single measurement range 45 dBA RMS ÷ 141 dB Peak

Audio events recording

Advanced data logger

Built-in non-volatile memory up to 64 MB

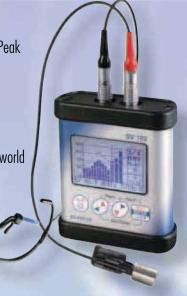
Automatic calibration thanks to the TEDS technology

• Individual evaluation of the HPDs attenuation in real-world

MIRE technique with SV 25S

Extremely compact, light weight

Low cost







# SV 25S MIRE Microphone

- Meeting ISO 11904-1, ANSI S12.42
- 55 dBA ÷ 120 dB Peak
- Determination of sound immissions from sources located close to the ear
- Individual real-world test of the earmuffs noise reduction ratio

# SV 102A Type 1 Dual-Channel Dosimeter

- Type 1 version of SV 102 dosimeter
- Type 1 prepolarised microphone and dedicated pramplifier
- Dual-channel 20 Hz ÷ 20 kHz band
- Measurement range 45 dBA RMS ÷ 141 dB Peak
- Measurements In Real Ear (MIRE)
- Low cost



# SVAN 954 Low Cost Vibration Analyser

### **FEATURES**

- Excellent for general vibration measurements and machinery condition monitoring
- IEPE, Charge and Direct input modes
- Three parallel independent profiles
- Parallel acceleration, velocity and displacement measurements.
- Built-in machine filter (10 Hz ÷ 1 kHz) meeting ISO 10816 requirements
- FFT analysis up to 1600 lines
- 1/1 octave real-time analysis
- RPM measurement parallel to the vibration measurements
- Advanced data logger of RMS/Max/P-P/Peak results including spectral analysis
- Compact, light weight and robust case (only ca 390 grams including batteries)
- Battery operational time up to 16 h (in the meter mode)
- USB 1.1 Client



### SVAN 956 Advanced Vibration Analyser

- Intended to advanced application such as balancing of rotation mass, sophisticated enveloping analysis or RPM measurement with laser tachometer
- $\bullet$  1/1 or 1/3 octave real-time analysis
- FFT real-time analysis up to 1600 lines with Hanning window
- IEPE and Direct input modes
- Three parallel independent profiles
- Parallel acceleration, velocity and displacement measurements
- Built-in machine filter (10 Hz ÷ 1 kHz) meeting ISO 10816 requirements
- Time-domain signal recording to the USB memory stick
- User programmable LP, HP and Band Pass filters
- One or two planes balancing function
- Advanced data logger with almost unlimited logging capacity
- Programmable measurement "route"
- AC output: direct & D/A converter



# SV 210 & SV 211 Noise Monitoring Systems

### **FEATURES**

- Environmental (Airport, City and Industrial) monitoring Type 1, IEC 61672:2002
- Weather protected, designed for the outdoor use
- Dedicated for sound meters/analysers: SVAN 955/7/9 or SVAN 979
- Remote communication via GPRS transmission, LAN & WLAN (over Internet)
- Internal controller providing additional interfaces, system check, fan and heater thermostatically controlled
- SV 205 weather conditions monitoring module including wind speed and direction data
- Powered from mains (SV 210 only), rechargeable internal battery,
   DC power supply or solar panel
- Easy data download, visualization and transfer to spreadsheet with SvanPC+ software

### **APPLICATIONS**

- On-line noise monitoring
- Long-term noise monitoring
- Acoustic map verification
- Verification of noise barrier effectiveness



SV 211



# SV 215 Indoor Noise Monitoring System

- Dedicated for indoor use (e.g. neighbourhood noise complaints)
- Audio events recording function to USB memory stick with remote manual trigger (noise source identification)
- 1/1 and 1/3 octave real-time analysis
- Advanced data logger with almost unlimited logging capacity
- Advanced automatic trigger function
- Compact and portable









# SV 212 & SV 213 Noise & Vibration Monitoring Systems

### **FEATURES**

• Environmental terminal with simultaneous noise & vibration monitoring

 Airport and community noise monitoring Type 1, IEC 61672:2002

Four-channel noise monitoring with SV 213 and four SV 208

Vibration measurements with KB filter, DIN 4150

 SV 207 triaxial vibration measurements with accelerometer in robust hermetic metal box with special levelling system

 SV 208 sound measurements set including outdoor microphone protection kit

Weather protected, designed for the outdoor use

• Four-channel 1/1 or 1/3 octave real-time analysis

Four-channel FFT real-time analysis

Time-domain signal recording (wave files)

 Sophisticated alarm functions including reporting via text messages (SMS) and e-mails

 Remote communication via GPRS transmission, LAN & WLAN (over internet)

 Internal controller providing additional interfaces, system check, fan and heater thermostatically controlled

 SV 205 weather conditions monitoring module including wind speed and direction data

 Powered from mains (SV 213 only), rechargeable internal battery, DC power supply or solar panel

 Easy data download, visualization and transfer to spreadsheet with SvanPC+\_RC software

### **APPLICATIONS**

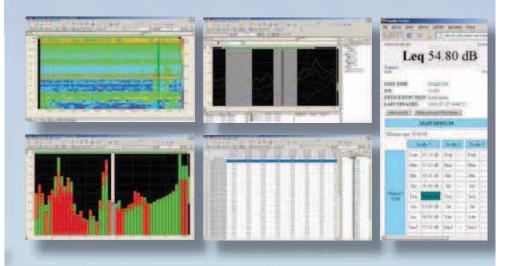
- On-line noise monitoring
- Ground and building construction vibration monitoring
- Long-term noise monitoring
- Acoustic map veryfication
- Veryfication of noise barrier effectiveness



# SvanPC+ software Powerful tool extending functionality of SVANTEK sound & vibration measuring instrumentation

#### **FEATURES**

- Downloading measurement results from instruments to PC
- Data and instrument settings visualisation (tables, graphs)
- Instrument settings adjusting (editor & wizard modes)
- Data files storage and management in project documents
- Data post-processing (e.g. spectra comparison, time-history recalculation, tonality analysis, dose calculation)
- Easy direct data export to commonly used applications
- Support for all new instruments
- RS 232 and USB interfaces compatible
- Windows 2000/XP and VISTA



# SvanPC+\_RC (Remote Communication module) Advanced software for data transmission dedicated for SVANTEK monitoring systems

- Remote communication using GPRS, LAN, WLAN and Internet
- Simultaneous data acquisition from many measuring stations or instruments
- Several type of communication modes (sessions data stored only in remote PC, AFD - periodical automatic or manual files download)
- Each instrument or monitoring station can be individually configured and controlled
- Real-time measurement results preview
- Automatically generated HTML code for data publishing
- Built-in ftp client for data transferring
- Sophisticated mechanisms for optimisation of GPRS transmission especially in case of lost connections

**SVANTEK** is Polish company established in 1990

Our mission is developing and producing the most advanced instrumentation for sound and vibrations measurements

### We are offering:

- Sound and vibration level meters
- Sound and vibration analysers
- Multi-channel meters and analysers
- Acoustic calibrators
- Signal generators
- Measurement microphones
- Accelerometers
- Environmental noise and vibration monitoring systems
- Instrumentation for building acoustics measurements
- Laboratory equipment including complete calibration systems
- Software for data downloading, post-processing, visualisation and export to popular applications
- Sophisticated software module for remote communication with instruments and monitoring system over GPRS, LAN, WLAN and Internet
- Accessories

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