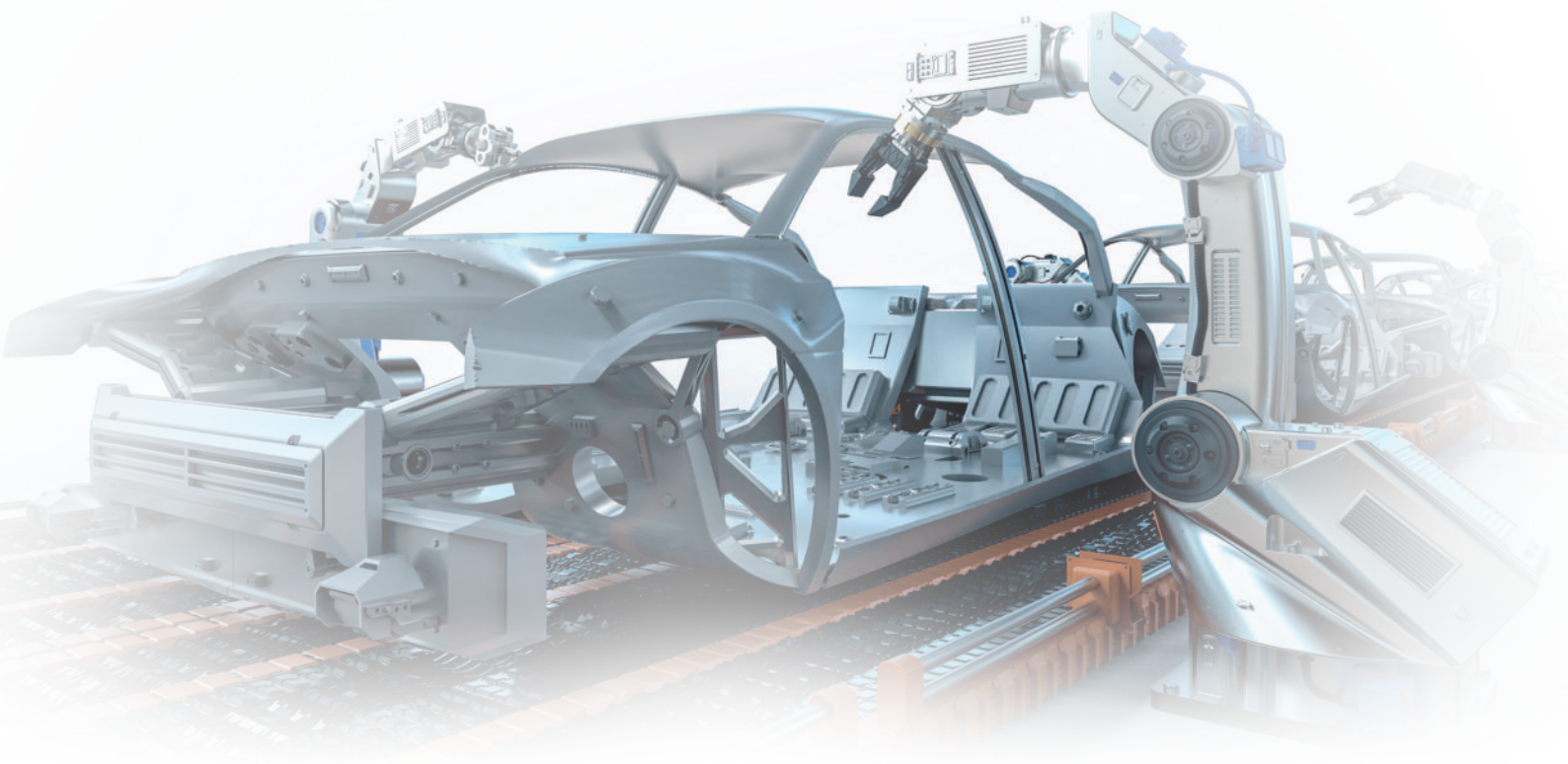




# SVAN 958A

## Four-Channel Sound and Vibration Analyser

SVAN 958A is a unique four-channel instrument offering 20 kHz-band sound & vibration analysis. It is a perfect choice for all applications that require simultaneous Class 1 noise measurements & triaxial vibration assessment. The real advantage of SVAN 958A is the capability to perform advanced analysis simultaneously in four-channel analysis such as FFT or octave band analysis. The list of analyser functions available includes: FFT, 1/1 or 1/3 octave, cross spectra, sound intensity, RT 60 and more.





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## Four-Channel Sound and Vibration Analyser



### Four-channel

Class 1 sound and vibration analysis

This four-channel Class 1 sound & vibration analyser is dedicated for engineering applications. Depending on an application, each channel can be independently configured e.g. one tri-axial and one mono-axial vibration sensor or four microphones etc. The meter enables the simultaneous four-channel real-time frequency analysis in 1/1 or 1/3 octave bands or FFT.



### Wide application

Production lines, and acoustics, production

The building vibration mode offers simultaneous velocity and acceleration measurements with the automatic indication of a dominant frequency. The meter can be also used for building acoustic measurements e.g. simultaneous 4-channel RT 60 measurements. Moreover, the RS 232 interface enables integration with the production line.



### Data logging

Four channel time history logging

In practise the SVAN 958A allows the collection of broad-band results such as Leq, RMS, Lmax, Lmin, Lpeak together with four-channel analysis like FFT or octave band analysis. The list of analyser functions available includes FFT, 1/1 or 1/3 octave, cross spectra, sound intensity, RT 60 and more. All measurement results are stored in the internal memory and can be easily downloaded to a PC with SvanPC++ software.

## Key Functions



Class 1 accuracy and precision

SVAN 958A is a unique Class 1 four-channel instrument offering 20 kHz-band sound & vibration analysis.



Four channel sound & vibration

Each of four input channels can be independently configured for sound or vibration modes with different filters and RMS detector time constants, giving users an enormous flexibility of measurement.



Real-time frequency analysis

The simultaneous four-channel real-time frequency analysis in 1/1, 1/3 octave or FFT bands. Functions can be activated at any time by ordering the activation code.



Building acoustics mode

The meter can be used for building acoustic measurements e.g. simultaneous 4-channel RT 60 measurements. Function can be activated at any time by ordering the activation code.



Building vibration firmware

The building vibration mode offers simultaneous velocity and acceleration measurements with the automatic indication of a dominant frequency.



Remote communication

The RS 232 interface connects with 4G, LAN or WLAN modems. Together with the SvanNET cloud service, these interfaces provide easy remote access to instrument settings & data over the Internet and local area networks.



Robust hardware with 3-year warranty

Robust aluminium housing protects the hardware against electromagnetic interference and also provides the comfort of a secure grip to the user. Each SVAN 958A is supplied with its factory calibration certificate and a 36-month warranty card.

## PC software



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, the export of data to a spread sheet and text editor applications.

## Optional accessories



SV 60  
Sound Measurement Kit



SV 80 / 81 Mono-axial  
Accelerometers



SV 84 / 85  
Tri-axial Accelerometers



SV 207B  
Building Vibration Kit



SM 258 PRO  
Monitoring Case



SV 55  
Cable for RS 232 devices



SV 111  
Vibration Calibrator



SV 208  
Outdoor Sound Measurement Kit



SV 36  
Class 1 Sound Calibrator  
94 dB / 114 dB at 1 kHz



SvanPC++ EM  
Post-processing software



## Technical Specifications

Vibration Level Meter & Analyser		
Standards	ISO 8041:2005, ISO 20816-1, DIN 4150-3, BS 7385-2	
Meter Mode Results	RMS, VDV, MTVV or Max, Peak, Peak-Peak	
Analyser (optional)	1/1 or 1/3 octave real-time analysis FFT 1600 lines with Hanning, Kaiser-Bessel or Flat Top window FFT cross spectra measurements RPM rotation speed measurements parallel to the vibration measurement (1 ÷ 99999)	
Filters	Wd, Wk, Wc, Wj, Wm, Wb, Wg (ISO 2631), Wh (ISO 5349), HP1, HP3, HP10, Vel1, Vel3, Vel10, VelMF, Dil1, Dil3, Dil10, KB (DIN 4150)	
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB Time constants: from 100 ms to 10 s	
Accelerometer (optional)	SV 84 triaxial high sensitivity accelerometer for ground or building vibration measurements (1 V/g) SV 38 triaxial accelerometers for whole-body measurements (1 V/g MEMS type)	
Measurement Range	Accelerometer dependent (with SV 84: 0.0005 m/s <sup>2</sup> RMS ÷ 50 m/s <sup>2</sup> PEAK)	
Frequency Range	0.8 Hz ÷ 20 kHz; accelerometer dependent	
Sound Level Meter & Analyser		
Standards	Class 1: IEC 61672-1:2013	
Meter Mode Results	SPL, Leq, SEL, Lden, LEPd, Overload time, Ltm3, Ltm5, LMax, LMin, LPeak, Simultaneous measurement in three profiles with independent filters and detectors	
Analyser (optional)	1/1 or 1/3 octave real-time analysis FFT 1600 lines with Hanning, Kaiser-Bessel or Flat Top window FFT cross spectra measurements Sound Intensity measurements	
Weighting Filters	A, C, Z and G	
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB Time constants: Slow, Fast, Impulse	
Microphone (optional)	MK 255, Class 1, 50 mV/Pa, prepolarised 1/2" condenser microphone with SV 12L preamplifier	
Measurement Range	Total Dynamic Range: 16 dBA RMS ÷ 140 dBA Peak Linearity Range (IEC 61672): 26 dBA RMS ÷ 140 dBA Peak	
Frequency Range	0.5 Hz ÷ 20 kHz (microphone dependent, with MK 255 microphone: 3.5 Hz ÷ 20 kHz)	
General Information		
Input	IEPE type (channels 1, 2, 3 - LEMO4-pin & channel 4 - TNC connector)	
Dynamic Range	100 dB, 4 x 20 bits A/D converters	
Frequency Range	0.5 Hz ÷ 22.4 kHz, sampling rate 48 kHz	
Data Logger	Time-history logging to internal memory	
Display	Super contrast (10000:1) OLED 2.4" colour display (320 x 240 pixels)	
Memory	32 MB non-volatile flash type	
Interfaces	USB 1.1 Client, RS 232 (option: SV 55 required) Extended I/O - AC output (1V Peak) or Digital Input/Output (Trigger / Pulse)	
Power Supply	Four AA batteries (alkaline) Four AA rechargeable batteries (not included) SA 17A external battery pack (optional) External power supply USB interface	operation time > 10 h (6.0 V / 1.6 Ah) <sup>1</sup> operation time > 14 h (4.8 V / 2.6 Ah) <sup>1</sup> operation time > 24 h 6 V DC ÷ 24 V DC (1.5 W) 500 mA HUB
Environmental Conditions	Temperature Humidity	from -10 °C to 50 °C (14 °F to 122 °F) Up to 90 % RH, non-condensed
Dimensions	140 x 82 x 42 mm	
Weight	510 grams with batteries (Approx. 2.00 lb)	

<sup>1</sup>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.