

SVAN 958

Four Channels Sound & Vibration Analyser

The SVAN 958 is all digital, four channel 20-kHz-band signal analyser including Type 1 sound level meter (meeting IEC 61672) and vibration meter (meeting ISO 8041). It is an ideal choice for Human Vibration (according to the ISO 2631-1,2&5 and ISO 5349-1&2 standards) and noise measurements in the occupational health and safety monitoring tasks. All required weighting filters, along with necessary accessories for triaxial Whole-Body and triaxial Hand-Arm vibration measurements are available with this instrument.

Each of four channels can work simultaneously with independently configured input (transducer type), filters and RMS detector time-constants (e.g. simultaneous three axis measurement of the Whole-Body vibration and noise dose).

Three profiles allow parallel measurements with independently defined filters and RMS detector time-constants in each sound channel. Each profile/channel provides "multidimensional" analysis of measured signal (e.g. for sound L_{eq} , L_{Max} , L_{Min} , L_{Peak} , SPL, SEL or for vibration RMS, Peak, Peak-Peak, VDV, MTVV). Advanced time-history logging, in non-volatile 32 MB internal memory, provides very powerful measurement capability. USB memory stick extends this facility almost unlimitedly. Results can be easily downloaded to any PC using standard USB (or RS 232 or IrDA) interface and SvanPC+ software.

Using computational power of its digital signal processor the SVAN 958 instrument can perform advanced frequency analysis simultaneously to the meter mode:

- real-time four-channel 1/1 octave or 1/3 octave analysis including statistical calculations
- real-time four-channel FFT analysis including cross spectra
- sound intensity measurements.

Measurements of Reverberation Time, noise dose and rotation speed are also available for SVAN 958.

The time-domain signal recording on the external USB memory stick is available as well as an exceptional feature!

SVAN 958 with RS 232 interface (SV 55) can be offered with GPRS modem, LAN & WLAN connection module. Together with SvanPC+_RC remote communication software, these interfaces provide easy remote access to instrument settings & data over internet and local area network.

Instrument is powered from four AA standard or rechargeable batteries as well as from the external DC power source or USB interface.

Robust case and light weight design accomplish the exceptional features of this new generation instrument.

FEATURES

- Four-channel, 20 kHz real-time, simultaneous sound and vibration measurements
- FFT real-time analysis up to 1600 lines in 20.0 kHz band
- 1/1 and 1/3 octave real-time analysis
- Human Vibration measurements meeting ISO 8041:2005 including VDV and MTVV
- Noise measurements Type 1, IEC 61672:2002
- Acoustic dose meter function
- Sound Intensity measurements
- Reverberation Time measurements
- Time-domain signal recording
- FFT cross spectra
- Advanced data logger including spectral analysis
- USB memory stick providing almost unlimited logging capability
- Advanced trigger and alarm functions
- USB 1.1 Client and USB Host interfaces
- RS 232 for modems support (GPRS, Ethernet, WLAN)
- Integration time programmable up to 24 h
- Powered by four AA standard or rechargeable batteries
- Easy in use, hand held, light weight and robust case



TECHNICAL SPECIFICATIONS

VIBRATION LEVEL METER & ANALYSER

Standards	ISO 8041:2005
Meter Mode	RMS, VDV, MTVV or Max, Peak, Peak-Peak
Analysers (option)	Simultaneous measurement in up to four channels with independent set of filters and detector constants 1/1 octave* real-time analysis, 15 filters with centre frequencies from 1 Hz to 16 kHz (Type 1, IEC 61260) 1/3 octave* real-time analysis, 45 filters with centre frequencies from 0.8 Hz to 20 kHz (Type 1, IEC 61260) FFT* real-time analysis up to 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) and more...
Filters	$W_d, W_k, W_c, W_j, W_m, W_b, W_g$ (ISO 2631), W_h (ISO 5349), HP1, HP3, HP10, Vel1, Vel3, Vel10, VelMF, Dil1, Dil3, Dil10, KB (DIN 4150)
RMS & RMQ Detectors	Digital true RMS & RMQ detectors with Peak detection, resolution 0.1 dB Time constants: from 100 ms to 10 s
Accelerometer (option)	SV 39A/L seat accelerometer (100 mV/g sensitivity) for Whole-Body measurements SV 38 low cost triaxial accelerometers for Whole-Body measurements (1 V/g MEMS type) SV 50 set for Hand-Arm measurements (Dytran 3023M2 accelerometer, 10 mV/g sensitivity)
Measurement Range	Accelerometer dependent, SV 39A/L seat accelerometer: 0.003 ms ⁻² RMS ÷ 500 ms ⁻² Peak
Frequency Range	0.5 Hz ÷ 20 kHz; accelerometer dependent, with Dytran 3023M2: 2 Hz ÷ 10 kHz

SOUND LEVEL METER & ANALYSER

Standards	Type 1: IEC 61672-1:2002
Meter Mode	SPL, L_{eq} , SEL, L_{den} , L_{tm3} , L_{tm5} , Statistics - L_n (L_1 - L_{99}), L_{Max} , L_{Min} , L_{Peak} Simultaneous measurement in three profiles per channel (up to four channels) with independent set of filters and detector time-constants
Analysers (option)	1/1 octave* real-time analysis, 15 filters with centre frequencies from 1 Hz to 16 kHz (Type 1, IEC 61260) 1/3 octave* real-time analysis, 45 filters with centre frequencies from 0.8 Hz to 20 kHz (Type 1, IEC 61260) Reverberation Time analysis in 1/3 octave bands (RT 60) FFT* real-time analysis up to 1600 lines with Hanning, Kaiser-Bessel or Flat Top window FFT* cross spectra measurements Sound Intensity measurements and more...
Weighting Filters	Standard: A, C, Z and G
RMS Detector	Digital true RMS detector with Peak detection, resolution 0.1 dB Time constants: Slow, Fast, Impulse
Microphone (option)	SV 22, Type 1, 50 mV/Pa, prepolarised 1/2" condenser microphone with SV 12L preamplifier SV 25, Type 2, dose meter, ceramic 1/2" microphone with integrated 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 SV 22 microphone: 10 Hz ÷ 20 kHz

BASIC DATA

Input	IEPE type (channels 1, 2, 3 - LEMO 4-pin & channel 4 - TNC connector)
Dynamic Range	100 dB, 4 x 20 bits A/D converters
Frequency Range	0.5 Hz ÷ 20 kHz, sampling rate 48 kHz
Data Logger*	Time-history logging to internal memory or USB memory stick Time-domain signal recording on USB memory stick (option)
Display	LCD 128 x 64 pixels plus icons with backlighting
Memory	32 MB non-volatile flash type, external USB memory stick (not included)
Interfaces	USB 1.1 Client, USB 1.1 Host, RS 232 (option: SV 55 required), IrDA (option) Extended I/O - AC output (1 V Peak) or Digital Input/Output (Trigger / Pulse)
Power Supply	Four AA batteries (alkaline) operation time > 10 h (6.0 V / 1.6 Ah)** Four AA rechargeable batteries (not included) operation time > 14 h (4.8 V / 2.6 Ah)** SA 17A external battery pack (option) operation time > 24 h*** External power supply 6 V DC ÷ 24 V DC (1.5 W) USB interface 500 mA HUB
Environmental Conditions	Temperature from -10 °C to 50 °C Humidity up to 90 % RH, non-condensed
Dimensions	140 x 82 x 42 mm
Weight	510 grams with batteries

* each function parallel to the meter mode ** with USB 1.1 Host function not active and backlight off

Continuous product development and innovation are the policy of our company. Therefore, we reserve the right to change the specifications without prior notice.

DISTRIBUTOR: _____



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