

# SVAN 956

## Vibration Meter & Analyser

The SVAN 956 is all digital, Type 1 vibration level meter along with analyser. Instrument is intended to general vibration measurements, machinery condition monitoring, occupational health and safety monitoring. It can be used by consultants, maintenance services and industry R&D departments etc. Instrument provides parallel acceleration, velocity and displacement measurements. Three vibration profiles allow parallel measurements with independently defined filters and RMS detector time constants. Each profile provides significant number of results (like RMS, Peak, Peak-Peak, VDV, MTVV or MAX). Advanced time history logging for each profile provides complete information about measured signal in non-volatile 32 MB internal memory or external USB Memory Stick and can be easily downloaded to any PC using USB interface and SvanPC+ software. All required weighting filters (e.g.:  $W_k$ ,  $W_c$ ,  $W_h$  for Human Vibration measurements or  $VelMF$  for machine diagnostic measurements) including the latest ISO 2631-1&2 and ISO 10816 standards are available with this instrument. RMQ detector enables direct measurement of the Vibration Dose Value (VDV).

For machine condition maintaining application the SVAN 956 instrument provides programmable "route" of the measuring points.

Using computational power of its digital signal processor the SVAN 956 instrument can additionally perform real time FFT analysis, 1/1 octave analysis, 1/3 octave analysis, balancing of rotation mass and sophisticated enveloping analysis. The SVAN 956 offers also RPM measurement with Monarch laser tachometer parallel to the vibration measurement.

The time domain signal recording on the external USB memory stick is available. The instrument can be controlled and the measurement results can be also downloaded to any PC using the RS 232 or IrDA interfaces.

Instrument is powered from four AA standard or rechargeable batteries (separate charger is required). The powering of the instrument from the External DC power source or USB interface is also provided.

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

## FEATURES

- FFT real time analysis - up to 1600 lines with Hanning window
- Parallel acceleration, velocity and displacement measurements
- Three parallel independent profiles of the meter mode
- Built-in machine filter (10 Hz ÷ 1 kHz) meeting ISO 10816 requirements
- Time domain signal recording to the USB Memory Stick
- Human Vibration measurements with Type 1 accuracy (ISO 8041)
- 1/1 octave real time analysis
- 1/3 octave real time analysis
- RPM measurements
- Balancing of the rotation mass
- Advanced Data Logger including spectral analysis
- Programmable measuring "route"
- USB Memory Stick providing almost unlimited logging capacity
- Advanced trigger function
- Easy in use
- USB 1.1 Host & Client interfaces
- RS 232 and IrDA interfaces
- Hand held, light weight and robust case
- Power supply by four AA rechargeable or standard batteries



# TECHNICAL SPECIFICATIONS

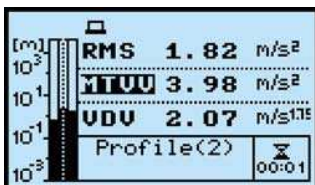
## VIBRATION LEVEL METER & ANALYSER

Standards	ISO 10816, ISO 8041:2005, IEC 61260
Results	RMS, Peak, Peak-Peak, VDV, MTVV or MAX, Time History Simultaneous measurement in three profiles with independent set of filters and detector time constants
Weighting Filters	HP1, HP3, HP10, Vel1, Vel3, Vel10, VelMF, Dil1, Dil3, Dil10, KB
RMS Detector	Digital True RMS detector with Peak detection, resolution 0.1 dB Time Constants: from 100 ms to 10 s
Accelerometer	Dytran 3185D accelerometer (sensitivity 100 mV/g)
Measurement range	Accelerometer dependent, with Dytran 3185D accelerometer: 0.003 ms <sup>-2</sup> RMS ÷ 500 ms <sup>-2</sup> Peak
Frequency range	0.5 Hz ÷ 20 kHz; accelerometer dependent, with Dytran 3185D accelerometer: 2 Hz ÷ 8 kHz
Data Logger*	Time History logging including spectra to internal memory or USB Memory Stick
Time domain recording*	Time domain signal recording on the USB Memory Stick (option)
FFT*	Real Time analysis 1600 lines with Hanning window
1/1 octave*	Real time analysis, 15 filters with centre frequencies from 1 Hz to 16 kHz meeting Type 1, IEC 61260 (option)
1/3 octave*	Real time analysis, 45 filters with centre frequencies from 0.8 Hz to 20 kHz meeting Type 1, IEC 61260 (option)
Balancing	One or two planes balancing function (option)
Enveloping	Advanced enveloping option dedicated for bearing diagnostics (option)
RPM measurements*	1 ÷ 99999 Rotation speed measurement parallel to the vibration measurement (option)
Human Vibration*	W <sub>k</sub> , W <sub>c</sub> , W <sub>d</sub> , W <sub>j</sub> , W <sub>m</sub> , W <sub>b</sub> , W <sub>g</sub> (ISO 2631), W <sub>h</sub> (ISO 5349) (option)
Band pass filters*	User programmable second order band pass filters (option)

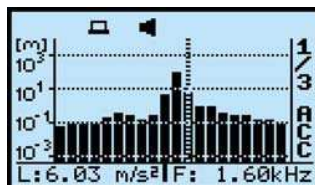
## BASIC DATA

Input	IEPE type with TEDS or Direct (TNC connector)	
Dynamic Range	110 dB	
Internal Noise Level	Less than 4 µV RMS	
Frequency Range	0.5 Hz ÷ 20 kHz, sampling rate 51.2 kHz	
Display	LCD 128 x 64 pixels plus icons with backlighting	
Memory	32 MB non-volatile flash type, USB Memory Stick (not included)	
Interfaces	USB 1.1 Client, USB 1.1 Host, RS 232 (option: SV 55 required), IrDA (Host option), External I/O - AC output (1 V Peak) or Digital Input/Output (Trigger - Pulse)	
Power Supply	Four AA batteries (alkaline)	operation time > 12 h (6.0 V / 1.6 Ah)**
	Four AA rechargeable batteries (not included)	operation time > 16 h (4.8 V / 2.6 Ah)**
	SA 17A external battery pack (option)	operation time > 24 h**
	External power supply	6 V DC ÷ 15 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 (without accelerometer)	
Weight	530 grams with batteries	

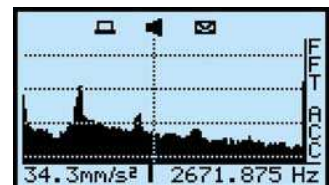
\* each function parallel to the meter mode \*\*with USB 1.1 Host function not active and backlight off



Three profiles view



1/3 octave analysis



FFT analysis

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

DISTRIBUTOR:



SVANTEK Sp. z o. o.  
Pl. Inwalidów 3/62  
PL 01-514 WARSAW, POLAND  
phone/fax (+48) 22 839 00 31, (+48) 22 839 64 26  
http://www.svantek.com e-mail: office@svantek.com.pl

ISO 9001  
CERTIFIED

SIGMAEST Messtechnik  
Industriepark 312  
D-78244 Gottmadingen  
Phone +49.7731.977001  
Fax +49.7731.977003  
info@sigmatest.net  
www.sigmatest.net

SIGMAEST Messtechnik  
Wannenacker 90  
CH-8243 Altdorf / SH  
Phone +41.52.6541361  
Fax +41.52.6541368  
info@sigmatest.net  
www.sigmatest.net