

# SVAN 954

## Vibration Analyser

The SVAN 954 is digital, Type 1 vibration level meter along with analyser. Instrument is intended to general vibration measurements and machinery condition monitoring. It can be used by consultants, maintenance services and industry R&D departments etc.

Instrument allows 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, or MAX). Advanced time history logging for each profile provides complete information about measured signal in non-volatile 16 MB internal memory and can be easily downloaded to any PC using USB interface and SvanPC+ software.

Most of required weighting filters, like VelMF meeting ISO 10816 standards requirements, are available with this instrument.

Using computational power of its digital signal processor the SVAN 954 instrument can additionally perform real time 1/1 octave analysis or FFT analysis. The SVAN 954 offers also RPM measurement with Monarch laser tachometer parallel to vibration measurement.

Instrument is powered from four AA standard or rechargeable batteries. The powering of the instrument from USB interface is also provided.

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

### FEATURES

- Low cost vibration analyser
- Parallel acceleration, velocity and displacement measurements
- Three parallel independent profiles
- Built-in machine filter (10 Hz ÷ 1 kHz) meeting ISO 10816 requirements
- FFT real time analysis - up to 1600 lines with Hanning window
- 1/1 octave real time analysis
- RPM measurements
- Advanced Data Logger of RMS / Max / P-P / Peak results including spectral analysis
- Programmable measuring "route"
- Advanced trigger function
- Power supply by four AA rechargeable or standard batteries
- Battery operational time up to 16 h (in the Meter Mode)
- Compact, light weight and robust case (only ca 460 grams including batteries)
- USB 1.1 Client
- Easy in use



## TECHNICAL SPECIFICATIONS

### VIBRATION LEVEL METER & ANALYSER

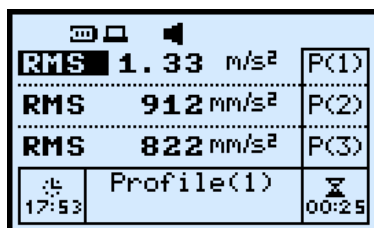
|                    |  |
|--------------------|--|
| Standards          | ISO 10816, Type 1; ISO 8041:2005; IEC 61260, Type 1  |
| Results            | RMS, Peak, Peak-Peak, Min or MAX<br>Simultaneous measurement in three profiles with independent set of filters and detector time constants |
| Weighting Filters  | HP1, HP3, HP10, Vel1, Vel3, Vel10, VelMF, Dil1, Dil3, Dil10, W <sub>h</sub> , KB   |
| RMS Detector       | Digital True RMS detector with Peak detection, resolution 0.1 dB<br>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 (option)  |
| 1/1 octave *       | Real time analysis, 15 filters with centre frequencies from 1 Hz to 16 kHz meeting Type 1, IEC 61260 (option)                              |
| FFT *              | Real Time 1600 lines with Hanning window (option)  |
| RPM measurements * | 1 ÷ 99999 Rotation speed measurement parallel to the vibration measurement (option)  |

### BASIC DATA

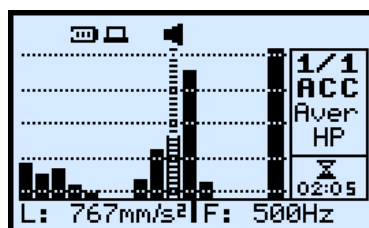
|                          |   |   |
|--------------------------|---|---|
| Input                    | IEPE interface with TNC connector   |   |
| Dynamic Range            | 100 dB  |   |
| Internal Noise Level     | less than 5 µV RMS  |   |
| Frequency Range          | 0.5 Hz ÷ 20 kHz, sampling rate 51.2 kHz   |   |
| Display                  | LCD 128 x 64 pixels plus icons with backlighting  |   |
| Memory                   | 16 MB non-volatile flash type   |   |
| Interfaces               | USB 1.1 Client, 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) ** |
|                          | USB interface   | 500 mA HUB                                |
| Environmental Conditions | Temperature   | from -10 °C to 50 °C                      |
|                          | Humidity  | up to 90 % RH, non-condensed              |
| Dimensions               | 140 x 83 x 33 mm (without accelerometer)  |   |
| Weight                   | Approx. 450 grams including batteries   |   |

\* each function parallel to the meter mode

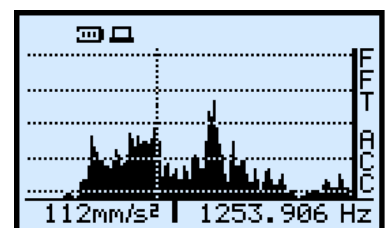
\*\* with backlight off



*Three profiles view*



*1/1 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.



**SVANTEK Sp. z o.o.**

Plac 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](mailto:office@svantek.com.pl)

CERTIFIED  
ISO 9001



苏州声和振动科技有限公司 (SuZhou SV Technology CO., LTD)

地址: 江苏苏州东吴北路 31 号

电话: 0512-67071025/67071026 传真: 0512-66351026

网址: <http://www.sv-china.com> 邮编: 215128