

SVAN 943B

Type 2 Sound Level Meter / Acoustic Dose Meter

The SVAN 943B is all digital, Type 2 sound level meter, acoustic dose meter and analyser. It is intended to general acoustic measurements, environmental noise monitoring, occupational health and safety monitoring.

Using computational power of its digital signal processor the SVAN 943B can perform real time 1/1 & 1/3 octave analysis including statistical calculations and real time FFT analysis. All weighting filters, required by standards (A, C, Lin), are available with this instrument.

Three acoustic profiles allow parallel measurements with independently defined filters and RMS detector time constants (Impulse,

Fast and Slow). Each profile provides significant number of results (Leq, Lmax, Lmin, LPeak, SPL, SEL etc.). Advanced time history logging for each profile provides complete information about measured signal in non-volatile 8 MB (or 48 MB option) internal memory and can be easily downloaded to any PC using USB 1.1 interface and SvanPC software.

Thanks to replaceable standard four AA batteries and robust, lightweight construction, the SVAN 943B can be used in hard environmental conditions over whole working day.



FEATURES

- Noise measurements (SPL, Leq, SEL, Statistics, TaktMax, time history) with Type 2 accuracy
- Three parallel independent profiles of the meter mode with time history (simultaneous to frequency analysis)
- 8 MB or 48 MB (option) internal memory for logging more than one week (six weeks) of the three 1 sec results (one result per profile)
- Measurement range 27 dBA RMS - 130 dBA RMS in the SLM mode
- 1/1 octave real time analysis with time history (option)
- 1/3 octave real time analysis with time history (option)
- FFT real time analysis (option)
- Acoustic dose meter function (option)
- Easy in use
- USB 1.1 interface (real time PC "front end" application supported)
- Integration time programmable up to 24 h
- Standard four AA batteries (operational time > 12 h with alkaline batteries)
- Hand held, light weight and robust case (only ca 600 grams including batteries)

TECHNICAL SPECIFICATIONS

SOUND LEVEL METER

| | |
|-------------------|--|
| Standards | Type 2: IEC 651, IEC 804 and IEC 61672-1 |
| Results | SPL, L_{eq} , SEL, L_{den} , L_{tm3} , L_{tm5} , statistics- L_n (L_1 - L_{99}), L_{Max} , L_{Min} , L_{Peak} , Time History Three profiles measure simultaneously with independent set of filters and detector times |
| Weighting Filters | A, C and Lin (Type 1: IEC 651, IEC 804 and IEC 61672-1) |
| RMS Detector | Digital True RMS detector with Peak detection, resolution 0.1 dB, Time Constants: Slow, Fast, Impulse |

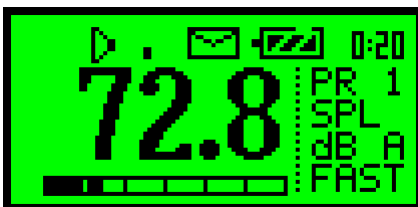
SOUND ANALYSER (OPTION)

| | |
|-------------|---|
| 1/1 octave* | Real time analysis with spectra logging down to 2 ms step 10 filters with centre frequencies from 31.5 Hz to 16 kHz (IEC 1261) |
| 1/3 octave* | Real time analysis with spectra logging down to 2 ms step 30 filters with centre frequencies from 25 Hz to 20 kHz (IEC 1261) |
| FFT* | Real time analysis |
| Dose meter* | Acoustic dose (8 h) for q = 3,4 or 5 (selectable) |

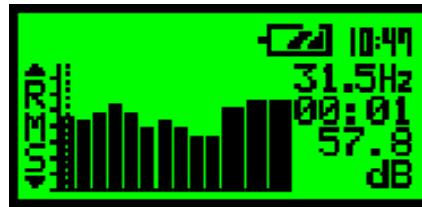
* EACH OPTION PARALLEL TO METER MODE

BASIC DATA

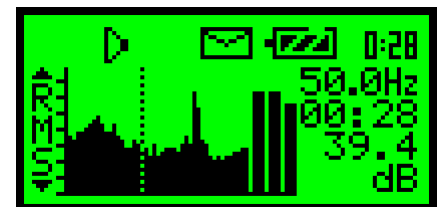
| | | |
|--------------------------|--|--|
| Input | IEPE interface with TNC connector | |
| Microphones | SV MI17, 1/4" Electret Microphone with built in IEPE preamplifier TNC connector SV MI17_1, 1/4" Electret Microphone with built in IEPE preamplifier LEMO connector (option) | |
| Measurement Range | 27 dBA RMS – 130 dBA RMS in SLM Mode 50 dBA RMS - 140 dBA RMS in Dose Meter Mode (option) | |
| Dynamic Range | 100 dB, 20 bits A/D converter | |
| Resolution | 0.1 dB | |
| Frequency Range | 20 Hz – 20 kHz (input microphone dependent) | |
| Sampling Rate | 48 kHz | |
| Display | LCD 97 x 32 pixels plus icons with backlighting | |
| Memory | 8 MB or 48 MB (option) non-volatile flash type | |
| Interface | USB 1.1 (real time PC "front end" application supported), analogue output AC 1 V Peak | |
| Power Supply | 4 x AA batteries | operation time > 12 h (alkaline batteries) |
| | With external battery | operation time > 24 h (optional SA 17A pack) |
| | External power supply | 6 – 24 V DC (1.5 W) |
| | USB interface | 5V @ 150 mA |
| Environmental Conditions | Temperature | -10 °C to 50°C |
| | Humidity | up to 90 % RH, non condensed |
| Dimensions | 280 x 82 x 42 mm (with microphone and preamplifier) | |
| Weight | Approx. 0.6 kg with battery | |



Main result one channel view



1/1 octave spectrum



1/3 octave spectrum

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



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