



## SOUND LEVEL METER

School Environmen

ork Environment

Environmental Research

Ultra compact

LIGHTWEIGHT

HIGH-PERFORMANCE

## Sound Level Meter *NL-27*



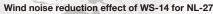
(Actual size)

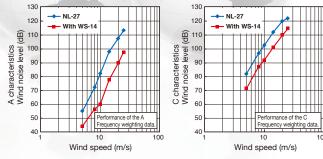
## Sound Level Meter *NL-27*

Features

- Compliant with Japan Measurement Law, JIS, and IEC requirements
- Wide 107 dB linearity range allows sound level measurements from 30 to 137 dB without range switching
- Easy measurement of sound level( $L_p$ ), equivalent continuous sound level( $L_{eq}$ ), maximum sound level( $L_{max}$ ), sound exposure level( $L_E$ ), and peak sound level( $L_{Cpeak}$ )
- Manual store function and capability to transfer data to a computer via optional USB adapter cable
- 9 hours operation on two AAA (IEC R03) alkaline batteries



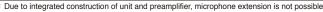




View with Silicone cover (supplied)

## Specifications

| Standard compliance                 | General-Purpose Sound Level Meter according to Japan                    | Calibration                           | Calibration frequency: 1 kHz,  |
|-------------------------------------|---|---------------------------------------|--|
|                                     | Measurement Law JIS C 1509-1: 2017 class 2,                             |                                       | Calibration sound level: 94 dB   |
|                                     | IEC 61672-1: 2013 class 2   |                                       | Japan Measurement Law: electrical calibration with internal                    |
|                                     | CE mark, WEEE Directive   |                                       | signal source; JIS, IEC: acoustic calibration using NC-74                      |
| Measurement functions               | Sound level $L_{p}$ , equivalent continuous sound level $L_{eq}$ ,      | Windscreen                            | Unit is compliant with JIS C 1509-1 class 2 and IEC 61672-1                    |
| Processing functions                | sound exposure level $L_E$ , maximum sound level $L_{max}$ ,            |                                       | class 2 with and without windscreen  |
| (normal mode)                       | peak sound level L <sub>Cpeak</sub> (only when peak range was selected) | Display                               | Numeric display: 0.1 dB resolution   |
| Measurement time settings           | 1 min, 5 min, 10 min, 1 h   | (TN positive display, reflective)     | Bar graph: Scale range 100 dB, 5 dB resolution (update frequency 0.1 s         |
| Microphone                          | 1/2 inch electret condenser microphone                                  |                                       | Warning indicators: Over (Overload) appears at 137.4 dB                        |
|                                     | Model: UC-52,   |                                       | (1 kHz) Under (Underload) appears from -0.6 dB of lower scale                  |
|                                     | sensitivity level: -33 dB ± 3 dB (re.1 V/Pa)                            |                                       | limit Battery capacity 3-stage indicator for remaining capacity                |
| Measurement level                   | A-weighting: 30 dB to 137 dB,   | Store function                        | Number of data: 199  |
| range (normal mode)                 | C-weighting: 36 dB to 137 dB  | (processing results saved in internal | Stored data can be checked on recall screen                                    |
| Linear operation range              | 30 dB to 137 dB   | memory, using manual store)           |  |
| (A-weighting, 1 kHz)                |   | DC output connector                   | DC output: 3 V (full scale), 25 mV/dB, output impedance: 50 Ω                  |
| Peak sound level                    | 65 dB to 140 dB   |                                       | Load impedance: 10 kΩ or more  |
| measurement range                   |   | AC monitor output                     | AC output: 1 Vrms +600 -400 mVrms (at 110 dB), overload: +2 dB                 |
| Residual noise level                | A-weighting: max. 24 dB, C-weighting: max. 30 dB                        | connector                             | Output impedance: 600 $\Omega$ , load impedance: 10 k $\Omega$ or more,        |
| Measurement frequency               | 20 Hz to 8 kHz  |                                       | frequency weighting: Z-weighting   |
| range                               |   | USB connector                         | For transfer of stored data to a computer, using optional USB adapter cable    |
| Reference frequency,                | Reference frequency: 1 kHz,   | Power requirements                    | Current consumption: approx. 80 mA (3 V operation)                             |
| reference sound pressure level      | reference sound level: 94.0 dB  | (size AAA [IEC R03] battery x 2       | Battery life: approx. 9 hours (with alkaline batteries),                       |
| Frequency weighting characteristics | A-weighting, C-weighting  | Normal temperature)                   | (Wide range) approx. 3 hours (with manganese batteries)                        |
| Time weighting characteristics      | F (Fast), S (Slow)  | Temperature /                         | -10 °C to +50 °C, 10 % to 90 % RH (no condensation)                            |
| Level range                         | Wide range: 30 dB to 130 dB, peak range*: 65 dB to 130 dB               | humidity range for operation          |  |
|                                     | * Peak range is used for peak sound level measurements                  | Dimensions, weight                    | Approx. 120 mm (H) × 63 (W) × 23.5 mm (D), approx. 105 g (including batteries) |
| RMS detection method                | Digital processing  | Supplied accessories                  | Windscreen × 1, Windscreen fall prevention rubber× 1,                          |
| Processing                          | Digital sampling cycle: 30.3 µs (Lp, Leg, LE, Lmax, Lpeak)              |                                       | Silicone cover × 1, strap × 1, AAA [IEC R03] alkaline battery × 2              |





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