

New
SOUND LEVEL METER



ULTRA COMPACT

LIGHTWEIGHT

HIGH-PERFORMANCE

SOUND LEVEL METER
NL-27



〈Actual size〉

Sound Level Meter NL-27

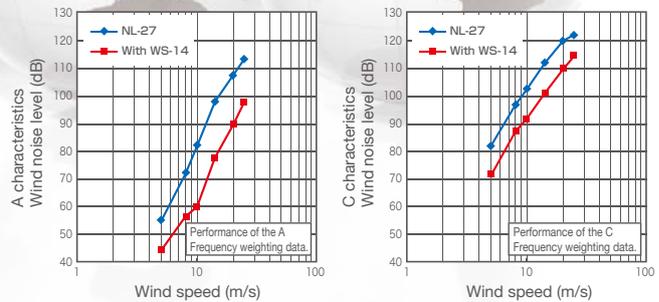
■ Features

- Compliant with Japan Measurement Law, JIS, and IEC requirements
- Wide 107 dB linearity range allows sound level measurements from 30 to 130 dB without range switching
- Easy measurement of sound pressure level(L_p), equivalent continuous sound pressure level(L_{eq}), maximum sound pressure 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 Silicon cover (supplied)

Wind noise reduction effect of WS-14 for NL-27



■ Specifications

Standard compliance	General-Purpose Sound Level Meter according to Japan Measurement Law JIS C 1509-1: 2005 Class 2, IEC 61672-1: 2002 Class 2 CE mark (EMC Directive 2004/108/EC), WEEE Directive
Measurement functions Processing functions (normal mode)	Sound pressure level L_p , equivalent continuous sound pressure level L_{eq} , sound exposure level L_E , maximum sound pressure level L_{max} , peak sound level L_{Cpeak} (only when peak range was selected)
Measurement time settings	1 min, 5 min, 10 min, 1 h
Microphone	1/2 inch electret condenser microphone Model: UC-52, sensitivity level: $-33 \text{ dB} \pm 3 \text{ dB}$ (1 V/Pa = 0 dB)
Measurement level range (normal mode)	A-weighting: 30 dB to 130 dB, C-weighting: 36 dB to 130 dB
Linear operation range (A-weighting, 1 kHz)	30 dB to 137 dB
Peak sound level measurement range	65 dB to 140 dB
Residual noise level	A-weighting: max. 24 dB, C-weighting: max. 30 dB
Measurement frequency range	20 Hz to 8 kHz
Reference frequency, reference sound pressure level	Reference frequency: 1 kHz, reference sound pressure level: 94.0 dB
Frequency weighting characteristics	A-weighting, C-weighting
Time weighting characteristics	F (Fast), S (Slow)
Level range	Wide range: 30 dB to 130 dB, peak range*: 65 dB to 130 dB * Peak range is used for peak sound level measurements
RMS detection method	Digital processing
Processing	Digital sampling cycle: 30.3 μs (L_p , L_{eq} , L_E , L_{max} , L_{Cpeak})

Calibration	Calibration frequency: 1 kHz, Calibration sound pressure level: 94 dB Japan Measurement Law: electrical calibration with internal signal source; JIS, IEC: acoustic calibration using NC-74
Windscreen	Unit is compliant with JIS C 1509-1 Class 2 and IEC 61672-1 Class 2 with and without windscreen
Display (TN positive display, reflective)	Numeric display: 0.1 dB resolution Bar graph: Scale range 100 dB, 5 dB resolution (update frequency 0.1 s) Warning indicators: Over (Overload) appears at 137.4 dB (1 kHz) Under (Underload) appears from -0.6 dB of lower scale limit Battery capacity 3-stage indicator for remaining capacity
Store function (processing results saved in internal memory, using manual store)	Number of data: 199 Stored data can be checked on recall screen
DC output connector	DC output: 3 V (full scale), 25 mV/dB, output impedance: 50 Ω Load impedance: 10 k Ω or more
AC monitor output connector	AC output: 1 Vrms +600 -400 mVrms (at 110 dB), overload: +2 dB Output impedance: 600 Ω , load impedance: 10 k Ω or more, frequency weighting: Z-weighting
USB connector	For transfer of stored data to a computer, using optional USB adapter cable
Power requirements (size AAA [IEC R03] battery x 2 Normal temperature)	Current consumption: approx. 80 mA (3 V operation) Battery life: approx. 9 hours (with alkaline batteries), (Wide range) approx. 3 hours (with manganese batteries)
Temperature / humidity range for operation	-10 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$, 10 % to 90 % RH (no condensation)
Dimensions, weight	Approx. 120 mm (H) x 63 (W) x 23.5 mm (D), approx. 105 g (including batteries)
Supplied accessories	Windscreen x 1, Windscreen fall prevention rubber x 1, Silicon cover x 1, strap x 1, AAA [IEC R03] alkaline battery x 2

* Due to integrated construction of unit and preamplifier, microphone extension is not possible.

* Windows is a trademark of Microsoft Corporation.

* Specifications subject to change without notice.

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