



SOUND LEVEL METER



ULTRA COMPACT

LIGHTWEIGHT

HIGH-PERFORMANCE

Sound Level Meter
NL-27



<Actual size>

Sound Level Meter

NL-27

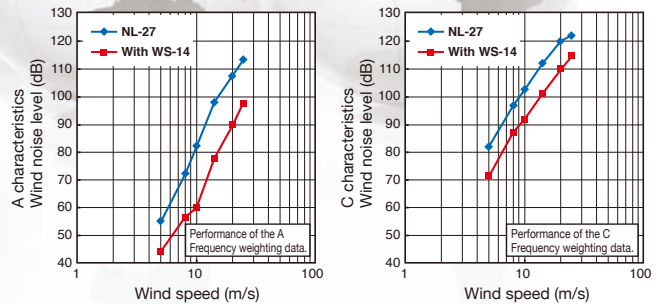
■ Features

- 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 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 Silicon cover (supplied)

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



■ Specifications

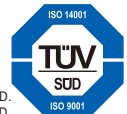
| | |
|---|--|
| Standard compliance | General-Purpose Sound Level Meter according to Japan Measurement Law JIS C 1509-1: 2005 Class 2, IEC 61672-1: 2013 Class 2 CE mark (EMC Directive 2004/108/EC, 2014/30/EU), WEEE Directive |
| Measurement functions | Sound level L_p , equivalent continuous sound level L_{eq} , sound exposure level L_E , maximum sound level L_{max} , peak sound level L_{Cpeak} (only when peak range was selected) |
| Processing functions (normal mode) | |
| Measurement time settings | 1 min, 5 min, 10 min, 1 h |
| Microphone | 1/2 inch electret condenser microphone Model: UC-52, sensitivity level: $-33 \text{ dB} \pm 3 \text{ dB}$ (re. 1 V/Pa) |
| Measurement level range (normal mode) | A-weighting: 30 dB to 137 dB, C-weighting: 36 dB to 137 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 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 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 $+600 \sim 400 \text{ mVrms}$ (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 | $-10 \text{ }^\circ\text{C}$ to $+50 \text{ }^\circ\text{C}$, 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.



RION Co., Ltd. is recognized by the JCSS which uses ISO/IEC 17025 (JIS Q 17025) as an accreditation standard and bases its accreditation scheme on ISO/IEC 17011. JCSS is operated by the accreditation body (IA Japan) which is a signatory to the Asia Pacific Laboratory Accreditation Cooperation (APLAC) as well as the International Laboratory Accreditation Cooperation (ILAC). The Quality & Environmental Management system Center of RION Co., Ltd. is an international MRA compliant JCSS operator with the accreditation number JCSS 0197.



ISO 14001 RION CO., LTD.
ISO 9001 RION CO., LTD.

* Windows is a trademark of Microsoft Corporation. * Specifications subject to change without notice.

Distributed by:

**RION CO., LTD.**
<http://rion-sv.com/>

3-20-41, Higashimotomachi, Kokubunji, Tokyo 185-8533, Japan
Tel: +81-42-359-7888 Fax: +81-42-359-7442

This product is environment-friendly. It does not include toxic chemicals on our policy.
This leaflet is printed with environmentally friendly UV ink on recycled paper.