

CRY2830 Series Sound Level Meter



Product Introduction



The CRY2830 Series Sound Level Meter is developed based on the IEC 61672-1:2013 standard. It is a high-precision noise monitoring instrument that utilizes a condenser microphone combined with a proprietary digital signal processing system, supporting wideband acoustic signal acquisition. The device can be configured with software function modules for integrating measurements, statistical analysis, 1/1 octave band analysis, 1/3 octave band analysis, and monitoring. Additionally, it supports extended capabilities such as sound recording, data transmission, and remote device control. With a single unit, users can efficiently perform diverse measurement and analysis tasks while ensuring the accuracy and reliability of acoustic data.

Strictly Complies with International Standards

The CRY2830 Series Sound Level Meters comply with the IEC 61672 standard and are available in either Class 1 or Class 2 accuracy.

High-Definition LCD Screen for Clear and Intuitive Readings

The CRY2831 is equipped with a 128 × 64 dot matrix LCD screen, while the CRY2833 and CRY2834 feature a 320 × 240 TFT LCD color display, making the data easy to read with high brightness and clarity.

Rich Interfaces for Easy Remote Control

The CRY2833 and CRY2834 sound level meters offer a complete set of interfaces including Bluetooth/WiFi, AC/DC signal output, RS232 as well as supporting the Modbus communication protocol for easy remote device control.

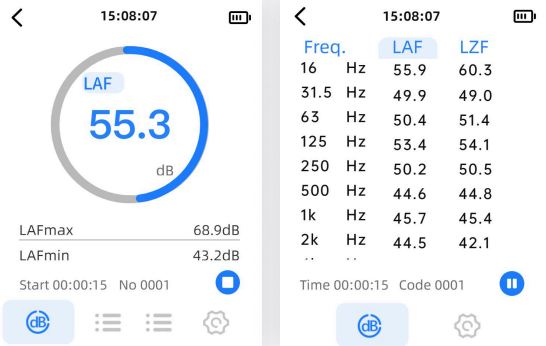
Expandable Outdoor Monitoring Kit

The CRY2833 and CRY2834 sound level meters can be equipped with dedicated extension cables and outdoor protection devices to meet all-weather monitoring needs in various complex environments, ensuring reliable data.

Technical Specifications

Ptproduct	CRY2831	CRY2834	CRY2833	CRY2833-L	CRY2833-H
Type	Basic	Multi-functional	Multi-functional	Low SPL	High SPL
Standard	IEC 61672-1:2013 Class 2	IEC 61672-1:2013 Class 2	IEC 61672-1:2013 Class 1	/	/
Measurement Range	29 - 138 dB(A)	25 - 140 dB(A)	25 - 140 dB(A)	14 - 130 dB(A)	44 - 160 dB(A)
Self-generated Noise	< 25 dB(A)	< 23dB(A)	< 17dB(A)	< 12dB(A)	< 35dB(A)
Frequency Range	20 Hz - 12.5k Hz	20 Hz - 12.5k Hz	10 Hz - 20k Hz	10 Hz - 12k Hz	10 Hz - 20k Hz
Frequency Weighting	A, C, Z	A, C, Z	A, C, Z	A, C, Z	A, C, Z
Time Weighting	F, S	F, S, I	F, S, I	F, S, I	F, S, I
Measuring Parameter	Lp, Lmax	Lp, Leq,t, Lpeak, Leq,T, Lmax, Lmin, LN (n=5, 10, 50, 90, 95), SD	Lp, Leq,t, Lpeak, Leq,T, Lmax, Lmin, LN (n=5, 10, 50, 90, 95), SD	Lp, Leq,t, Lpeak, Leq,T, Lmax, Lmin, LN (n=5, 10, 50, 90, 95), SD	Lp, Leq,t, Lpeak, Leq,T, Lmax, Lmin, LN (n=5, 10, 50, 90, 95), SD
Measuring Functions	Non-integrating	Integrating, Statistical Analysis, 1/1 Oct (Optional), 1/3 Oct (Optional), Monitoring (Optional), Data Storage (32GB microSD card)	Integrating, Statistical Analysis, 1/1 Oct (Optional), 1/3 Oct (Optional), Monitoring (Optional), Data Storage (32GB microSD card)	Integrating, Statistical Analysis, 1/1 Oct (Optional), 1/3 Oct (Optional), Monitoring (Optional), Data Storage (32GB microSD card)	Integrating, Statistical Analysis, 1/1 Oct (Optional), 1/3 Oct (Optional), Monitoring (Optional), Data Storage (32GB microSD card)
Interface	AC/DC	AC/DC, USB-C, RS232, BT/WiFi or GPS (select one)	AC/DC, USB-C, RS232, BT/WiFi or GPS (select one)	AC/DC, USB-C, RS232, BT/WiFi or GPS (select one)	AC/DC, USB-C, RS232, BT/WiFi or GPS (select one)
Display	128 × 64 Dot Matrix LCD	320 × 240 TFT Display	320 × 240 TFT Display	320 × 240 TFT Display	320 × 240 TFT Display

Device Functions



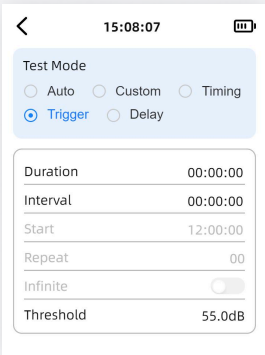
Intuitive Presentation of Measurement Parameters

The sound level meter is equipped with a multi-parameter interface, allowing measurement data to be displayed intuitively on the same screen. It supports flexible combinations of various time weightings (F/S/I) and frequency weightings (A/C/Z), with all parameters calculated in real-time and in parallel.



Reliable Storage of Test Data

All measurement data is automatically saved to the microSD card in standard CSV format, ensuring complete records. A configurable Bluetooth / WiFi module enables wireless data transmission, or an integrated GPS module can be included to meet remote monitoring and geographic information tagging needs.



Intelligent Alarm and Recording for Exceeding Limits

It features a sound level exceedance alarm function. When the alarm is triggered, it automatically stores the exceeded data points and starts recording, while also supporting the reporting of exceedance status information.



IP54 Enclosure Protection

The CRY2833 & CRY2834 enclosure meets the IP54 protection rating, safeguarding against dust and splashes of rainwater.

All-Time Noise Monitoring

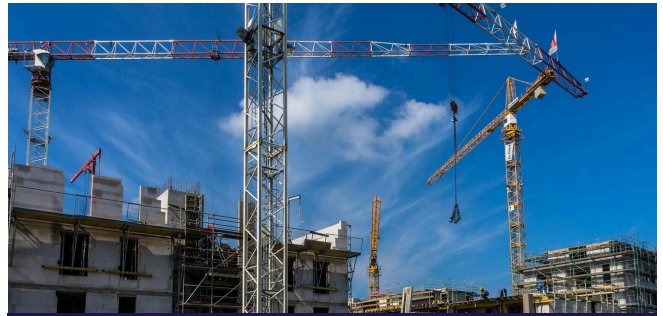
The CRY2833 and CRY2834 sound level meters feature a rugged design, supporting continuous operation in a wide temperature range from -20°C to 60°C . Their IP54-rated housing provides protection against rain, snow, and dust. With a 32GB microSD card for continuous data storage, it ensures reliable data retention in off-grid environments like outdoor sites and industrial facilities.

Applications



Integrated Noise Monitoring System

Each CRY2833 and CRY2834 sound level meter can be part of an integrated system, enabling multi-device networking and cloud management through Bluetooth, WiFi, and RS232 for seamless noise monitoring.



Construction Site Noise Monitoring

The CRY2833-H can measure high levels without overloading thus preserving the accuracy of Lmax and Lpeak even in extreme cases.



Product Sound Quality Monitoring

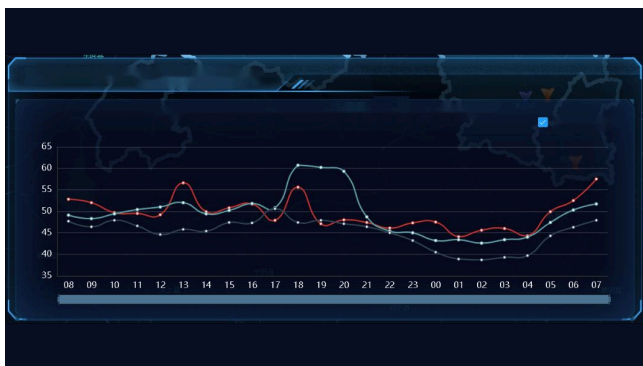
The CRY2833 and CRY2834 sound level meters support 1/1 octave and 1/3 octave band analysis, as well as sound exposure level calculations. It dynamically displays LN values, helping companies optimize product sound quality.



Urban Traffic Noise Monitoring

The CRY2833 and CRY2834 sound level meters can be equipped with a GPS positioning module, which allows for simultaneous recording of sound and position. It automatically marks the coordinates of the exceedance locations.

Case Studies



Using the CRY2833 and CRY2834 sound level meters for integrating noise monitoring allows for intuitive presentation of noise measurement data such as LAF, Leq, and LN on a large screen.



The CRY2833 and CRY2834 sound level meters, when used with the N41 protector (IP65), automatically record and transmit real-time data when noise exceeds set thresholds, creating an auditable trail of noise events.



Ordering Information

CRY2831 Sound Level Meter

Suitable for basic noise measurement.

Standard accessories: windshield, 4×AA batteries.



CRY2833/CRY2834 Sound Level Meter

Suitable for multifunctional noise measurement.

Standard accessories: windshield, power adapter, USB-C power cable, DB9 communication cable, 4×AA batteries.

CRY2833-H/CRY2833-L Sound Level Meter

Suitable for high level or low level measurement.

Standard accessories: windshield, power adapter, USB-C power cable, DB9 communication cable, 4×AA batteries.





Optional Accessories

CRY563A Sound Calibrator

Complies with the requirements of IEC 60942 Class 1 standard. Outputs 1 kHz signals at 94 dB / 114 dB.



NA41 Outdoor Protection Device

IP65-rated for dust and water resistance.

Effectively reduces wind noise by over 30 dB at a wind speed of 10 m/s.



NA1001 Bluetooth Printer

Uses thermal printing technology.

Prints test data quickly and clearly.



BL2121 Extension Cable

Available in 3 m, 5 m, 8 m, and other optional lengths. Suitable for outdoor monitoring integration or long-distance measurements.



Measure Sound Better



CRY SOUND

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