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# CRY2301 Noise Sensor Product Brochure


CRY2301 noise sensor is a new type of industrial-grade acoustic sensor, which can accomplish real-time noise time domain analysis and frequency domain analysis with our real-time spectrum analysis software. Product performance accord with the performance requirements of GB/T3785 Type 1 and IEC 61672 Level 1.

CRY2301 integrates measuring microphone, preamplifier, data acquisition, data communication into compact structure. And it supports an optional one-inch high-sensitivity microphone which can be used for extremely low sound pressure test, with excellent performance.

CRY2301 uses the USB Interface for data communication and power supply. It is a composition USB device compound with USB Audio device and HID device and compatible with 32-bit / 64-bit Windows7/Windows10 system.

The real-time spectrum analysis software of CRY2301 can easily obtain time domain and frequency domain measurement data. Real-time spectrum analysis software supports frequency weighting and time weighting, which can be used for the noise statistical analysis, the octave analysis, FFT analysis and other acoustic analysis.

**Acoustic analysis function**

- Time Domain Noise Analysis

Support the time domain acoustic pressure level curve display, the time domain waveform display, commonly used time domain sound pressure level data calculation, etc.
Support Lp, Lmax, Lmin, Lpeak, Leq test, and the test time is set within 1s-24h .(Need to customize)

- Octave Analysis

Support 1/1, 1/3, 1/6, 1/12, 1/24 Oct analysis and calculate the total frequency value of a specified frequency range
The Average mode: support RMS average, peak average
Time average: support linear average and exponential average

- FFT Spectrum Analysis

FFT line number 2400/4800/9600/19200/24000/48000
Window function Supports average mode such as Hanning/Hamming/Blackman/Flat Top/Gaussian
The Average mode： support RMS average, peak average.
Time average: support linear average and exponential average.
Overlap Analysis: 0%-75%

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**Typical Applications**

- Acoustic analysis of quality inspection of auto parts
- Acoustic analysis of household appliances
- Environmental noise analysis
- Noise condition monitoring of large equipment

| Technical parameters of hardware and software products | |
|---|---|
| Applicable standards | IEC61672 Level 1、GB/T3785 Type 1 |
| Measuring range | 25~130dBA（20~140dBA expandable） |
| Dynamic range | ≥110dB |
| AD sample rate | 48kHz |
| Detection method | Full Digital |
| Local noise (electrical signal) | 22dB(A)、23dB(C)、27dB(Z) |
| Measuring Frequency range | 10Hz~20kHz |
| Frequency weighting | A、C、Z |
| Time weighting | F、S |
| Measuring parameters | Lp、Leq、Lmin、Lmax |
| Octave analysis | Oct(1/1 、1/3 、1/6 、1/12、1/24) |
| Spectrum analysis | FFT Analysis |
| Supply voltage | USB 5V Power supply |
| Sensor size | Φ24.5mm×138mm |
| Weight | 115g |
| Working conditions | -20~+50℃, Relative humidity≤90% No condensation |
| Operating environment | Windows7/Window10 32bit or 64bit |