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CRY2120 Noise Sensor (universal) Manual V1.0

Introduction

CRY2120 noise sensor is a new type of industrial-grade noise sensor, comply with IEC61672-1 and GB/T3785-1 standard.

CRY2120 noise sensor integrates measurement microphone, preamplifier, high-precision ADC, high-speed DSP processor and excellent hardware design which provides 110dB dynamic range and can measure lower to 25dBA environment noise. The sensor has a compact structure with small appearance, the stainless-steel shell gives a perfect corrosion resistance.

CRY2120 universal version uses RS-485 bus interface as the data communication port with far communication distance, stable signal and convenient multi-channel cascade. It uses custom communication protocol for data communication. Also, to facilitate industrial automation applications, it also provides 4-20mA current, 1-5V or 2-10V voltage output interface.

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Acoustic Testing Capability

- Lxy (x = A/C/Z frequency-weighting, y = F/S time-weighting)
- 1/3 octave analysis

Typical Application

- System Integration Noise Analyze
- Construction Noise Monitor
- Production Noise Analyze
- Environment Noise Monitor

Parameter

CRY2120 Noise Sensor Technical Parameters	
Model	CRY2120 (universal)
Communication Type	Custom communication protocol
Standard	IEC61672-1, GB/T3785-1
Measurement Range	25~130dBA (Related to the microphone)
Dynamic Range	≥110dB, without switch range
Standard Microphone	CRY333
Optional Microphone	CRY311 (1/2" to 1" adaptor is required)

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AD Sampling Rate	48kHz
Detection Method	Fully digital
Background Noise (electrical signal)	19dB(A), 21dB(C), 27dB(Z)
Frequency Range	10Hz~20kHz
Frequency Weighting	A / C / Z
Time Weighting	F / S
Measurement Function	Lxy (x=A/C/Z, y=F/S), 1/3 octave analysis
SPL Output	RS-485 & 4-20mA / 1-5V / 2-10V (choose one of three)
Power Supply	DC 5-24V (Use high voltage power supply when use analog outputs)
Appearance Size	φ24.5mm×111mm
Weight	115g
Operating Conditions	-10 ~ +50℃; RH: ≤90% (without condensation)