## 



# **CRY3213** 1/2" NVH Outdoor Rugged **Microphone**

### **Features**

- **Key Specifications** 
  - Nominal Sensitivity Dynamic Range Frequency Range

50 mV/Pa 18 dBA-135 dB 3.15 Hz-20 kHz ±2 dB

Applications

Optimization of Vehicle Interior Quietness Powertrain Noise Reduction Detection and Elimination of Abnormal Noises High-Temperature Environmental Testing

Standards

IEC 61094 4:1995 Measurement microphones - Part 4

### Introduction

CRY3213 is a high-precision microphone specifically designed for demanding NVH testing. With its IP67 protection rating and an operating temperature range of -40°C to 125°C, it reliably performs in harsh environments such as high humidity, dust, and extreme temperatures, ensuring data accuracy in complex scenarios. It is an ideal solution for automotive powertrain noise, road noise, and wind noise measurements.

### Highlights

#### **IP67 Water and Dust Resistance**

Safe for use in humid and splashing environments, compliant with IP67 standards.

#### **Power Indicator**

Visual status confirmation upon power-on for convenient operation.

#### **Harsh Environment Adaptation**

Designed for extreme conditions, operating temperature range: -40°C to 125°C, ensuring accurate measurements in demanding environments.

#### **Replaceable Grid**

Equipped with a built-in filter grid (for heavily polluted environments) and a standard grid for easy replacement and flexible testing.

#### Impact Resistance

Maintains stable performance even under drops, vibrations, or accidental impacts, ensuring reliable data in automotive testing.

#### Compatibility

The CR\3213 High-Temperature NVH Measurement Microphone requires a constant current power supply module (IEPE) with 2mA to 20mA current and 24V no-load voltage.

#### Calibration

Factory-calibrated using traceable calibration equipment, with a calibration certificate included. Annual recalibration is recommended.

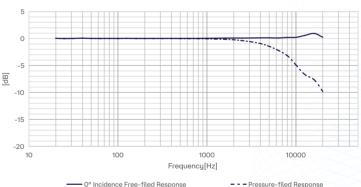


### **Technical Specifications**

#### Specifications

Specifications	
Field Type	Free-field
Sensitivity(±2 dB)	50 mV/Pa, -26 dB re 1V/Pa
Frequency Response	3.15 Hz-20 kHz ±2 dB
Polarization Voltage	0 V
Capacitance@250Hz	15pF
Dynamic Range(re.20uPa)	18 dBA-135 dB
Operating Temperature	-40°C- +125℃
Pressure Equalization Vent	Side vented
Output Impedance	< 50 Ω
Maximum Output Voltage	> 8.0 Vp
Distortion	<-70 dB at 1V, 1 kHz <-60 dB at 1V, 10 kHz
Noise	<4 μV A-weighted <8 μV Lin., 22.4 Hz to 22.4 kHz
Power Supply	IEPE (2-20) mA, Typical: 4 mA
DC Bias Voltage	12 V± 2 V
Interface Type	BNC
Storage Temperature	-25°C~70°C
Operating Humidity	0-90%RH no condensation
Certification	IP67
Shock Testing	1000m/s
Vibration Testing	80m/s2

#### **Frequency Response**



- - - Pressure-filed Response

Fig.1 CRY3213 NVH Ruggedized Measurement Microphone

#### **Dimensions**

Height with Grid	79.5 mm (3.1")
Diameter with Grid	14.5 mm (0.6")

#### Drawings(mm)[inch]

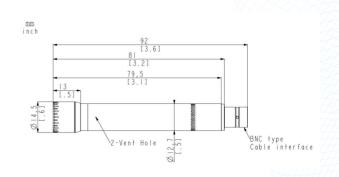


Fig.2 CRY3213 NVH Ruggedized Measurement Microphone Drawings

### **Product Configuration**

Microphone	CRY3213 NVH Weatherproof Test Microphone
Calibrator Adapter	Compared to the standard microphone top grid, the CRY3213 has a slightly larger protective grid, requiring a dedicated calibration adapter.
Replaceable Protective Grid	Equipped with a standard protective grid for convenient measurement.

