

# Model NM-4112 / 4110

## Outdoor Microphone

### Typical Applications

- System Integration
- Construction Noise
- Production Noise
- Transportation Noise
- Airports

### Features

- Comply with IEC61672-1 / 2 and GB/T3785-1 / 2
- 4-20 mA current loop and RS-485 output, transmit more than 1 km
- Direct connection to **METEODATA** Unit of **NOISE MAPPER** System
- 110 dB dynamic range, low noise measurement to 25 dBA
- Small size with 35 mm diameter and 300 mm length
- Wide range power supply from DC 5 V to 24 V
- Stainless steel shell, robust in harsh environments

### Overview

**NM-4112 / 4110** microphone is an industrial-grade remote sound level meter, that comply with IEC61672-1 / 2 and GB/T3785-1 / 2. Measured sound pressure level data can be output in RS485 digital signal and 4-20 mA analog signal, transmission distance is greater than 1 km, easy connection to **METEODATA** Data Acquisition and Transmission Unit.

The microphone has small appearance with stainless steel shell, built-in high sensitive acoustic sensor (measurement microphone), preamplifier, data acquisition module, DSP processor; excellent performance, 110 dB dynamic range, low noise measurement to 25 dBA.

The microphones have been widely used in machinery and equipment, industrial enterprises, construction, road construction site, airports and social living environment noise testing, monitoring and evaluation.



### METEODATA

Data Acquisition & Transmission Unit  
(3G / GPRS, Radio, Line or Satellite)



Technical Specifications	NM - 4112	NM - 4110
Applicable Standards	IEC61672 Class 1 GB/T3785 Type 1	IEC61672 Class 2 GB/T3785 Type 2
Measurement Range	25 ~ 130 dBA (customizable from 20 to 140 dBA within dynamic range)	
Dynamic Range	≥ 110 dB, no range selection needed	
AD Sampling Rate	48 kHz	
Background Noise	19 dB(A) 20 dB(C) 23 dB(Z)	22 dB(A) 23 dB(C) 24 dB(Z)
Frequency Range	10Hz ~ 20kHz	
Frequency Weighting	A (default) , C , Z	
Time Weighting	F (default), S	
Measurement Function	NM-4112A / 4110A (4-20mA output): Lp or LAeq NM-4112D / 4110D (RS485 output, Integration time can be customized): - Freq. Weighting A: LAF, LAS, LAF max, LAS max, LAPeak, LAeq, LA10, LA50, LA90 - Freq. Weighting C: LCF, LCS, LCF max, LCS max, LCPeak, LReq, LC10, LC50, LC90 - Freq. Weighting Z: LZP, LZS, LZP max, LZS max, LZPeak, LZeq	
Output	NM-4112A / 4110A: 4-20 mA NM-4112D / 4110D: RS-485	
Power Supply	DC 5 - 24 V	
Dimensions	Φ24.5 mm × 115 mm	
Weight	115 g	
Temperature Range	-20 ~ +50 °C; Relative Humidity: ≤80%	
Shell Material	Stainless steel, robust in harsh environments	
Option CIC-411 (for in NM-4112D / 4110D)	The Charge Injection Check (CIC) feature allows precise verification of the microphone (including preamplifier and cabling) at remote sites	

