



OM241 / OM261

Semi-permanent Outdoor Microphone

Features:

- Optimized for 0° and 90° incidence to meet IEC 61672-1
- Delivered with Individual calibration data
- IP55 enclosure to against rain, dust and perching birds
- The protection kit can be quickly remove for calibration
- ICCP power supply, low inherent noise, typical noise level is approx. 17dBA

Application:

- Aircraft and airport noise measurement
- Urban, traffic and industrial noise measurement
- Acoustic measurement in severe weathers



Introduction

OM241/OM261 semi-permanent outdoor microphone is developed by BSWA Tech for outdoor noise monitor. Semi-permanent outdoor microphone has no built-in calibration device and therefore requires periodic calibration using a sound calibrator for short-term noise measurement.

The frequency response of **OM241** is optimized for 0° incidence, primarily for aircraft and airport noise measurement. The **OM261** is optimized for 90° incidence, primarily for urban, traffic and industrial noise measurement. Both of two types of microphones have been specially designed to achieve the free-field frequency response in specified direction of incidence within the limits of IEC 61672-1. Each microphone is supplied with an individual calibration certificate that contains the actual sensitivity and free-field frequency response data for the complete set of outdoor microphones. Users can use the calibration data to correct the measurement data for more accurate results.

OM241/OM261 meets the IP55 ingress protection rating. The 90mm windscreen, internal rain hood and dust mesh can fully protect microphone to against wind, rain, snow, dust and other severe weathers. The bird spike prevents impact of perching birds to the measurement.

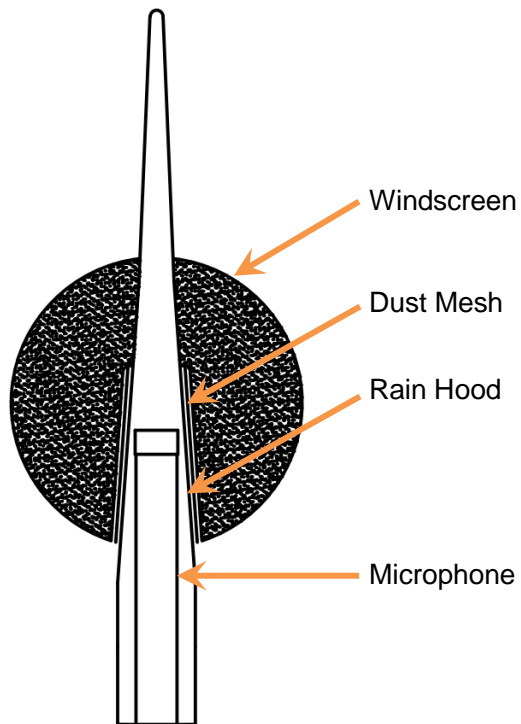
Specifications

| Type | OM241 | OM261 |
|--------------------------|---|-------------------------------------|
| Application | Aircraft and airport noise | Urban, traffic and industrial noise |
| Incidence | 0° | 90° |
| Standard | GB/T 3785.1-2010 1 级, IEC 61672-1:2013 Class 1, ANSI S1.4-1983 Type 1 | |
| Built-in Microphone | 1/2" prepolarized measurement microphone | |
| Sound Field | Free-field | |
| Open-circuit Sensitivity | 50mV/Pa | |
| Frequency Response | 10Hz~20kHz (According to IEC 61672-1) | |
| Dynamic Range | 17dBA~134dBA (50mV/Pa) | |
| Peak SPL | 137dBA peak | |
| Maximum Output Voltage | 5Vrms | |
| Inherent Noise | ~17dBA | |



| | |
|------------------|---|
| Output Impedance | <30Ω |
| Power Supply | ICCP power supply (2mA~20mA, 4mA Typ.) |
| Conditions | Temperature: -30℃~80℃, Humidity: 0%~95%RH |
| Connector | BNC |
| Mounting Thread | 1/4" thread |
| Enclosure | IP55 |
| Size(mm) | Ø90x222 (without extension rod), Ø90x372 (with extension rod) |
| Weight | 89g (without extension rod), 203g (with extension rod) |

Microphone Protection



The microphone is protected from wind, rain, snow and dust by a windscreen, dust mesh and rain hood.

The special acoustic design minimizes the influence of protection kit on the free-field frequency response to meet the requirements of IEC 61672-1.

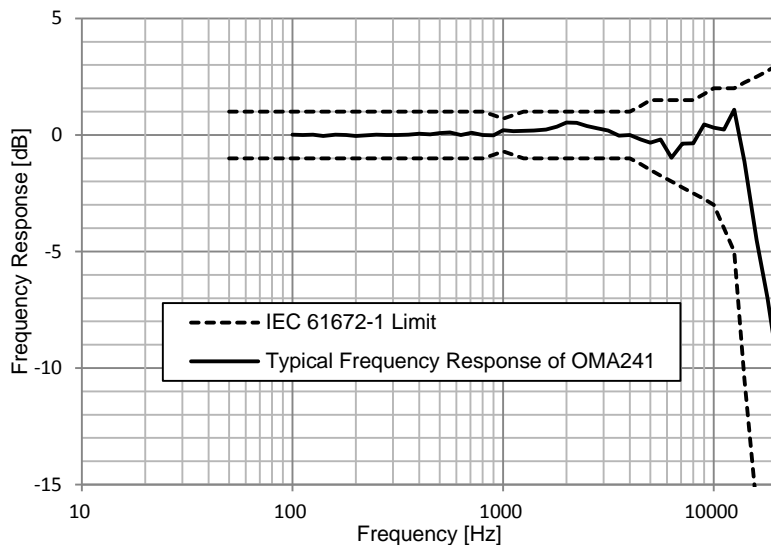
Calibrate by Sound Calibrator

Protection kit can be easily removed. Internal use of 1/2" pre-polarized microphone allows calibration with a 1/2" sound calibrator.

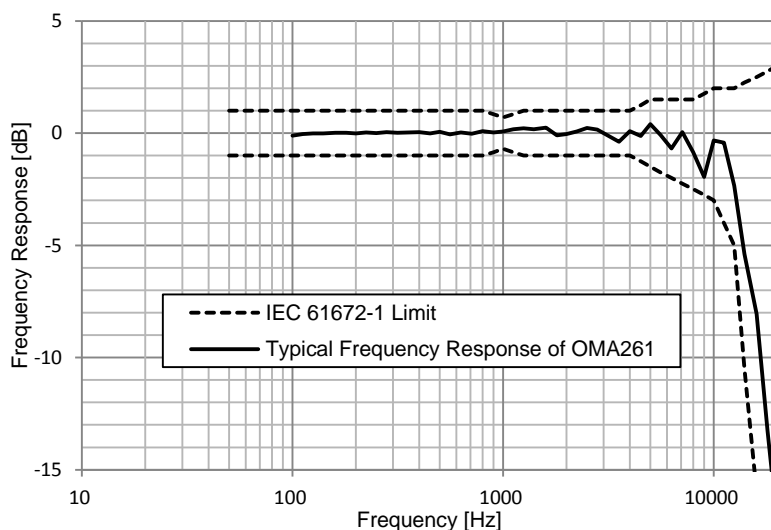




Typical Free-field Frequency Response



Typical free-field frequency response of OM241



Typical free-field frequency response of OM261

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