



## Product brief

# IM70A135V01

IP57 dust and water resistant analog differential XENSIV™ MEMS microphone

### Product overview

Key parameters	Specifications
Environmental robustness	IP57
Sensitivity @ 1 kHz, 94 dB SPL	-38 ±1 dBV
Signal-to-Noise Ratio (SNR)	70 dB(A) @ 2.75 V 69 dB(A) @ 1.6 V
Acoustic overload point (1/10% THD)	130/135 dB SPL
Current consumption	170 µA @ 2.75 V 70 µA @ 1.6 V
Low frequency roll off (LFRO)	37 Hz
Group delay @ 1 kHz	2 µs
Supply voltage	1.52 to 3.00 V
Interface	Analog differential
Port location	Bottom port
Package dimensions	3.50 x 2.65 x 1.00 mm

### Key features

- > Component level IP57 water and dust resistant
- > 70 dB(A) signal-to-noise ratio
- > Acoustic Overload Point (AOP) of 135 dB SPL
- > Tight sensitivity (-38 ±1 dB) tolerance
- > 37 Hz low frequency roll-off
- > Analog differential output
- > 170 µA current consumption

### Benefits

- > Far-field and low volume audio pick-up
- > Clear audio signals even for highest sound pressure levels
- > Highest precision of audio beams and algorithms

### Typical applications

- > Active Noise Cancellation (ANC): headphones and wireless earbuds
- > Voice User Interface (VUI): e.g. smart speaker, home automation, and IOT devices
- > High quality audio capturing: e.g. cameras, laptop, tablet, and conference systems

### Package information

