



## Transducers USA Introduces New Electret Condenser Microphones

The electret Condenser microphone is a ferroelectric material that maintains a permanent electrical charge and is polarized. The MEMS (Micro-Electrical Mechanical System) Microphone is a microphone chip where the diaphragm is etched onto a silicon wafer to allow for extremely small microphones to fit tiny applications.

Nearly all cell phone, computer, PDA and headset microphones are electret types. They are used in many applications, from high-quality recording and lavalier (lapel mic) use to built-in microphones in small sound recording devices and telephones. Electret microphones now rival traditional condenser microphones in every respect, and can even offer the long-term stability and ultra-flat response needed for a measurement microphone.



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The electret condenser and MEMS microphone lines from Transducers USA range from 34 to 57 dB. Models operate at 2.0V to 4.5V and 150 $\mu$ A to 500  $\mu$ A current. Several types are available in the electrostatic lines:

- Omnidirectional – featuring a choice of termination: bullseye (solderless), PC pins and solder terminals; sizes range from 4.5 dia. x 3.0 ht. to 9.7 dia. x 6.5 ht.;
- Unidirectional – with solderless termination; sizes range from 6.0 dia. x 2.7 ht. to 9.7 dia. x 6.5 ht.
- Noise Cancelling – with solderless termination; sizes range from 6.0 dia. X 2.7 ht. to 6.0 dia. X 1.8 ht.
- MEMS – with surface mount termination; sizes typically around 4.5 dia. X 1.45 ht.

(All sizes shown are mm)

Additional models available include the KECG2742 model which is IP57 rated. The KECG2742 model is dustproof and watertight for outdoor use, such as public safety microphones or outdoor headsets. The surface-mount is ideal for cameras, headsets, cell phones and other small handheld electronics.