

TECHNOLOGY

FROM ISRO

MEMS Acoustic Sensor

MEMS Acoustic sensor is used to monitor the Acoustic Levels generated during the launch of a satellite launch vehicle. It is a piezoelectric, MEMS sensor with built-in electronics. MEMS technology enables miniature devices to be precision, batch-fabricated. The sensors work in harsh environments of temperature, vibration and shock.



Salient Features

- Bulk micro machined silicon diaphragm with Piezoelectric sense layer on Silicon

Parameter	Specification	Remarks
Measurement range	100 -180dB	(MEMS chip's capability)
Sensitivity (typical)	0.225mV/Pa	for 165dB sensor
Amplitude Linearity (130dB – 160dB)	±2dB	<1dB (Typ.)
Frequency flatness	±3dB upto 8kHz	Octave bands from 31.5Hz to 8KHz
Output DC offset	< ±100mV	
Power Supply	±5V, 5mA or ±15V, 5mA	
Weight	65grams	

- System design done at ASPD/AVIONICS/VSSC
- Process design & fabrication at SCL, Chandigarh
- Built in electronics hence Eliminates external signal conditioning
- Reduction in cabling and ease of integration
- Sensitivity adjustable by gain resistors

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ISRO is willing to offer this technology to eligible interested parties who are in the field of manufacturing similar items

Interested entrepreneurs are requested to contact the address given below with all relevant particulars regarding their line of current activity, infrastructure available, market assessment of the product, financial arrangements strength of the company, turn over and sales of their products for the past few years and a copy of their latest annual report.

For further details please contact:

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