

# Specification Sheet

## Micromate Plus™ Linear Microphone

The Linear Microphone for the Micromate Plus monitoring unit automates the monitoring of air overpressure from a range of applications such as blasting and construction. It can simultaneously record with a geophone and sound level microphone on the Micromate Plus, making it a cost effective and flexible microphone for these applications. The Linear Microphone is not tied to a specific base unit, and can easily be switched out when calibration is required to avoid unit downtime.

### Range of Applications

- Construction
- Dynamic Compaction
- Remote Access
- Blasting
- Civil Projects
- Environmental
- Demolitions
- Underground Mines
- Heavy Transportation
- Pile Driving
- Oil & Gas
- Quarries
- Tunnels & Subways

### Measuring Capabilities

- Calibrated to the ISEE-2022 standard
- Frequency measuring range from 2 Hz to 250 Hz
- Amplitude range up to 1000 Pa (0.145 psi, or 154 dB)



### Specifications

Response Standard	ISEE - 2022
Frequency Weighting	Linear
Frequency Range	2 Hz - 250 Hz
Amplitude Range	Up to 1000 Pa (0.145 psi, or 154 dB)
Trigger Levels	2 to 1000 Pa 0.00029 to 0.145 psi 100 dB(L) to 154 dB(L)
Sample Rates	1024, 2048, 4096 S/s
Resolution	0.0305 Pa $4.4262 \times 10^{-6}$ psi 0.05 dB
Temperature Range	-40°C to 55°C (-40° to 131°F)
Accuracy	2 Hz: -3 dB ± 1 dB, 3 Hz: -1 dB ± 1 dB, from 4 Hz to 125 Hz: ±1 dB, 200 Hz: +1 dB to -3 dB, 250 Hz +1 dB to -4 dB
Humidity	Up to 95% RH, non-condensing

### Product Information

Length	14.5 cm (5.71 in)
Diameter (End)	1.8 cm (0.71 in)
Weight	291.1 g (0.64 lb)
Cable Length	2 m (6.56 ft)
Cable Length Extensions	10 m (32.8 ft), 30 m (98.4 ft), 75 m (246.1 ft)
Maximum Cable Length	77 m (252.6 ft)
Type	Outdoor
Connector Pins	4
Connector End	Red
Calibration	Annual

## Warranty

InstanTEL products come with a limited one-year warranty against defects in materials or workmanship unless otherwise stated. The warranty begins on the date of shipment from the InstanTEL factory to the customer and is subject to certain exclusions and conditions as stated below. Monitoring units and sensors will have the warranty extended for a second year if they are returned to the InstanTEL factory for service and calibration within 30 days of the 'Next Calibration' date printed on the calibration label located on the product.

If, within a period of one year from the date of shipment to a customer, the instrument fails to perform in accordance with InstanTEL's published specifications under normal use and operating conditions, it will be repaired or replaced at the sole discretion of InstanTEL free of charge. Components subject to fair wear and tear in regular use, as solely determined by InstanTEL, are excluded from this coverage. This warranty will not apply if the damage or malfunction occurs due to (i) adjustments, additions, alternations, abuse, misuse or tampering of the instrument; (ii) instrument operation or use contrary to the operating instructions; (iii) power fluctuations; or (iv) any other cause not within the cause or control of InstanTEL. If inspection by InstanTEL fails to disclose any defect covered by this limited equipment warranty, the instrument will be repaired or replaced at customer's expense and InstanTEL's regular service charges will apply. This warranty is non-transferable.

Any shipments returned directly to InstanTEL must have prior approval, and all packages must display the Return of Material Authorization (RMA) number issued by InstanTEL. Shipping charges to InstanTEL's factory will be paid by the customer and return shipment to the customer will be paid by InstanTEL.

To protect your warranty, you must complete and return a Warranty Registration Certificate, or complete the online Warranty Registration Form, within ten days of purchase. Products will be assumed out of warranty if no warranty card is on file at InstanTEL. Retain this warranty statement and the proof of purchase for your records.

Except for the foregoing limited equipment warranty, InstanTEL makes no other warranties and hereby disclaims and excludes all other warranties, whether statutory, express or implied, whether arising under law or equity or custom or usage, including any implied warranty of merchantability, fitness for a particular purpose, non-infringement, satisfactory quality, or quiet enjoyment, and any warranty that the product supplied may not be compromised, or that the product will in all cases provide the function for which it is intended.

## EC Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.