

Vibrometer

The First Quantum-Accelerated
Photonics Vibrometer

Summary

Unlock the future of non-contact vibration detection with our low optical power quantum photonic vibrometer. It leverages quantum mechanics to detect and inspect highly obscured objects at great distances, and opens new frontiers in remote sensing.

Specifications

| | |
|--|-------------------------|
| Weight | 13.4 pounds |
| Size | 14 x 14 x 6 inches |
| Power supply | 120 V/AC or 12 V/DC |
| Operating temperature | 0 - 70 °C / 32 - 158 °F |
| Frequency range | 30 - 25,000 hertz |
| Working distance | Upon request |
| Minimum detectable vibration amplitude | Upon request |

Details

Sensitivity

The Quantum Photonic Vibrometer delivers unparalleled detection accuracy at the single photon level, outperforming traditional vibrometers.

Resolution

Only quantum-aided remote sensing can achieve the granular observations needed to distinguish between the target object and its environment.

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Applications

Humane landmine identification

Our Quantum Photonic Vibrometer can be used to remotely detect objects buried deep in the ground such as landmines, without the need for physical proximity.

Voice reconstruction

The Quantum Photonic Vibrometer can isolate and detect non-visual conversations and in 'noisy' environments with numerous data inputs by sensing micro-vibrations from surfaces to recreate voices.

Improved non-destructive evaluation testing

Our Quantum Photonic Vibrometer can provide rapid and comprehensive monitoring of stress, strain, and fatigue in objects, such as evaluating the condition of bridges and other infrastructure, enhancing preventive industrial maintenance, and real-time detection of material degradation.

Safer surveillance & detection

Utilizing quantum technology, the vibrometer can be customized to perform reconnaissance and detection applications in dense foliage or cave systems

Mastering material recognition

With our Quantum Photonic Vibrometer, businesses can make informed decisions based on precise and reliable material recognition, unlocking new possibilities for resource exploration, industrial quality control, and sustainable waste management practices.

Future Plans

- A significantly extended detection range
- Nanofabrication to make the form factor smaller
- The ability to be affixed to a drone