

Distributed Acoustic Sensing (DAS)

For Perimeter Security and Critical Conduit Infrastructure Monitoring

With years of experience and systems installed for critical safety applications worldwide, the new FiberStrike Distributed Acoustic Sensing (DAS) system has stemmed from an improved understanding of the needs of our customers and our unique DAS technology.

The result? A unique system architecture that not only achieves the world's leading measurement range for true phase-based systems without the use of amplification, but also results in enhanced usability, reduced signal artifacts such as fading, and improved measurement performance. These proven system capabilities are all encompassed within a compact and portable system design that can operate even in harsh environmental conditions.



Performance

- ✓ Measurement performance that balances detection sensitivity (Probability of Detection) and detection reliability (reduced false and nuisance alarm rate)
- ✓ AI-based detection algorithms enable rapid adaptation of the DAS system to the environment
- ✓ Application-specific extraction and processing of measurement data
- ✓ New algorithms improve the dynamic range and minimum detectable signal by more than 75%

Reliability

- ✓ Significantly improved product lifetime (more than doubled)
- ✓ Standard operating temperature range improved by 25%
- ✓ Extremely low false alarm rate
- ✓ 30% reduced power consumption, ideal for installation in remote and low voltage environments
- ✓ Intelligent self-diagnosis tool for improved troubleshooting and smooth operation
- ✓ State-of-the-art IT security standards

Ease of Use

- ✓ Intelligent commissioning features for reduced setup time
- ✓ API feature set provides the capability to develop project-specific software applications
- ✓ Lightweight and integrable design supports portability
- ✓ Various solutions for integration into third party software or custom cloud-based solutions
- ✓ Increased data storage expansion options



DAS Designed for Your Infrastructure

	LCM-5125 Series	LCM-5225 Series	LCM-5226 Series
Power Cable Monitoring	●	●	
Pipeline Leakage Detection	●	●	
Well and Reservoir Monitoring			●
Geo-and Hydrological Monitoring			●
Perimeter Monitoring	●	●	
Railway Monitoring		●	

Why Choose the FiberStrike DAS?

- ✓ Revolutionary DAS technology – provides a true linear measurement of strain changes generated by acoustic/vibration signals along the sensing fiber.
- ✓ Intelligent event detection: Our proprietary deep learning algorithms precisely analyze acoustic patterns and reliably classify events.
- ✓ Outstanding signal-to-noise floor improvements of over 75% and an improved pulse rate that doubles both the resolvable acoustic frequency and the distortion-free acoustic amplitude.
- ✓ Available in single and simultaneous two-channel versions with extended standard temperature performance. Features 100 km measurement range with two simultaneous channels

