

AP SENSING

SENSING

5TH GENERATION DAS



Fifth Generation. First Choice.

With 35 years of experience and thousands of systems installed for critical safety applications worldwide, the **new AP Sensing Distributed Acoustic Sensing (DAS)** system has stemmed from an improved understanding of the needs of our customers and our **unique 2P Squared 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 %

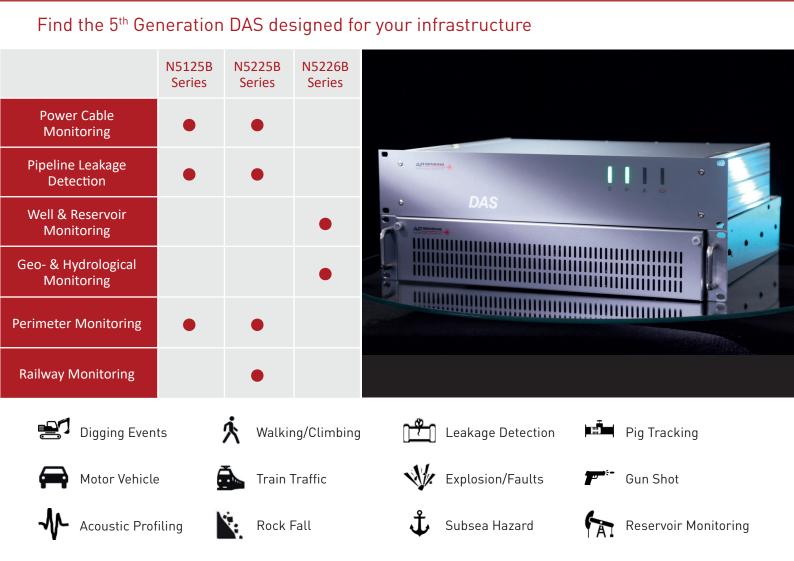
Reliability

- 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 projectspecific 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





Why Choose AP Sensing's 5th Generation DAS?

- Revolutionary 2P Squared technology provides a true linear measurement of strain changes generated by acoustic/ vibration signals along the sensing fiber.
- Intelligent event detection: AP Sensing's proprietary deep learning algorithms precisely analyze acoustic patterns and reliably classify events.
- Outstanding signal-to-noise ratio (SNR) accompanied by a world-leading measurement range for phase-based systems without additional amplification.
- Leading performance from 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.



WANT TO KNOW MORE?

Contact our experienced, multilingual team

www.apsensing.com

info@apsensing.com

***** +49 7031 309 6610