

AI Intrusion Detection Engine

See more. Decide better.

Actionable multi-activity TPI intelligence — in one seamless system.



C1300A AI Intrusion Detection Engine

With years of experience and thousands of DFOS systems installed for critical safety applications worldwide, AP Sensing's AI Intrusion Detection Engine solution is shaped by deep customer insights. Building on our proven DAS platform with global field deployments and strong ML expertise, it delivers reliable, automated multi-activity detection and classification in one cohesive system, no compromises. The scalable architecture supports growth across assets and applications. The result: long-term investment protection of the assets and measurable performance gains, bringing trusted intelligence, efficiency, and security to critical infrastructure monitoring.



Reliable TPI Detection

- Reliable and simultaneous event recognition even under challenging acoustic conditions
- Configurable alarm zones ensure precise localization and response
- Adaptive ML algorithms tuned for high accuracy and stability across long ranges and varying environments
- Optimized for low nuisance and false alert rates



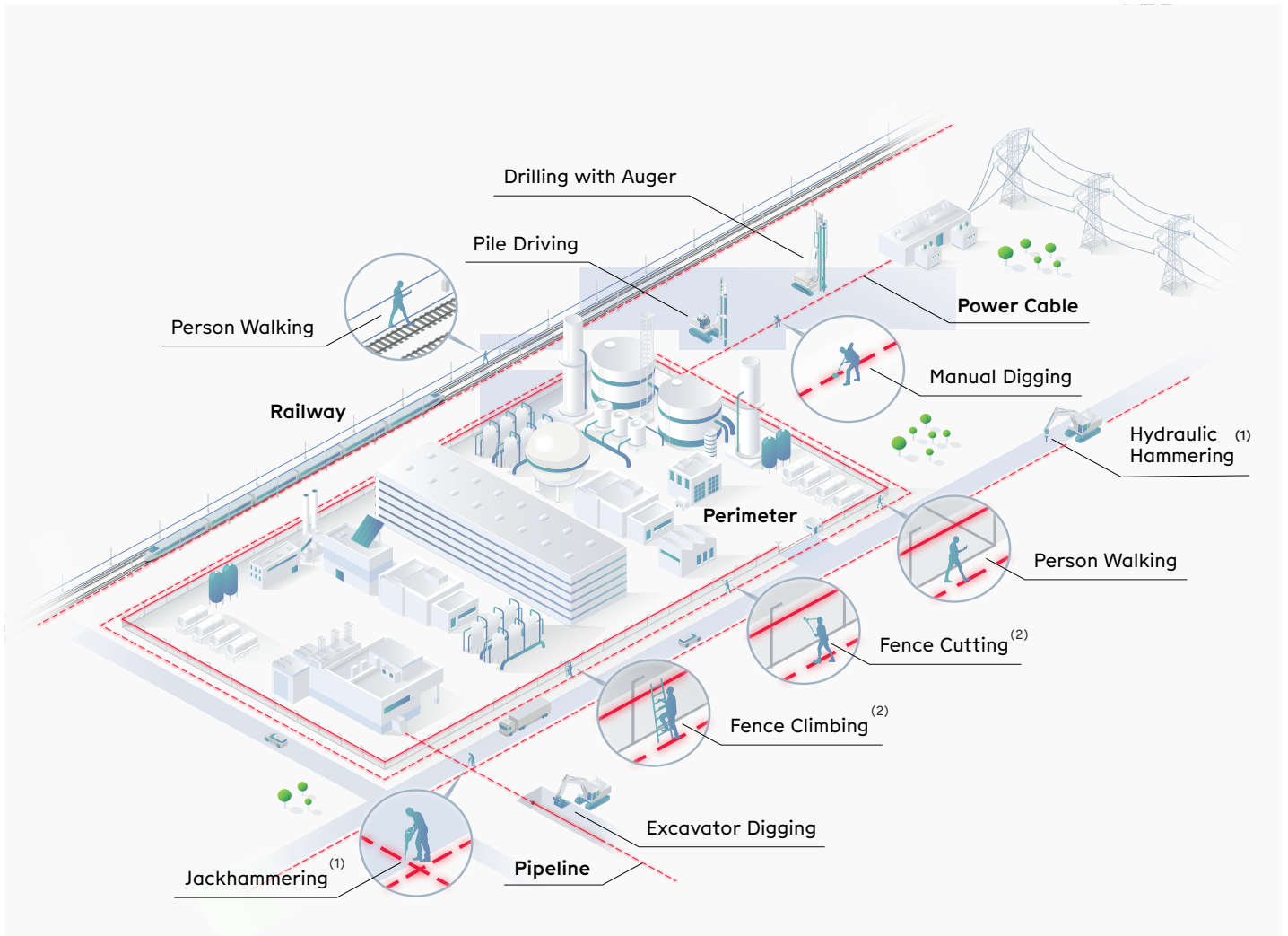
Classification & Aggregation

- Extensible multi-class detection for simultaneous recognition of diverse activities such as
 - + excavator digging
 - + jackhammering ⁽¹⁾
 - + pile driving
 - + auger drilling
 - + manual digging
 - + person walking and
 - + fence tampering ⁽²⁾
- Continuous optimization of models improves detection confidence and consistency over time



Scalability & Interoperability

- Scalable across long distances and simultaneous multi-asset monitoring
- Integrated visualization with SmartVision software and third-party solutions
- Seamless updates provide access to ongoing performance improvements
- Encrypted compute modules ensure trusted system integrity for secure operations



Why Choose AP Sensing's AI Intrusion Detection Engine?

- **Proven at scale:** Over 40 years of fiber-optic expertise and thousands of global DFOS installations ensure unmatched reliability in real-world operations.
- **Built on AP.Sensing's DAS platform:** delivers automated, high-confidence multi-activity detection and classification in one cohesive solution.
- **Simultaneous multi-class detection:** identifies excavators, jackhammers, digging, walking, fence attacks, drilling etc. simultaneously.
- **Configurable alarm zones** plus intelligent aggregation and verification minimize nuisance and false alarms.
- **Adaptive ML engine:** tuned to real acoustic environments for consistent, high-accuracy performance across long distances.
- **Scalable & interoperable:** unified visualization in DAS Configurator and SmartVision for multi-site deployments.
- **Upgradable by design:** seamless software and model updates, enhancing recognition performance and detection classes while maintaining full integration continuity.



Learn More About the Product:
<https://www.apsensing.com/en/product/ai-intrusion-detection-engine>



More Information:
 +49 7031 309 6610
www.apsensing.com
info@apsensing.com