Future Fibre
TECHNOLOGIES

FFT Aura Ai-XS

Short perimeter intrusion detection powered by deep learning.



Aura Ai-XS is the latest generation, data driven, fibre sensing technology designed specifically for perimeters of up to 10 km (2x5 km), with Aura Ai-XSB developed for shallow amd short range buried applications. The solutions' continuous improvement capability changes the POD vs NAR paradigm – driving Nuisance Alarm Rates (NAR) towards zero while maintaining the highest Probability of Detection (POD).

UNRIVALLED PERFORMANCE
Exceptional event classification accuracy resulting in the highest POD with near-zero nuisance alarms. Unmatched by any other commercial system.

EMBEDDED DEEP LEARNING ENGINE
Removes the need for ongoing onsite tuning and algorithm upgrades - backed by FFT's Global Data Library and family of generalized and custom Deep Learning models.

PROVEN TRACK RECORD
Validated on more than 50 project sites. Real-time Deep Learning drives weather related nuisance alarms towards zero with PODs > 95%.

CONTINUOUS IMPROVEMENT
Deep Learning model improvements via FFT ATLAS. Maximises system performance and provides full auditing over the long term and traceability of performance improvements.



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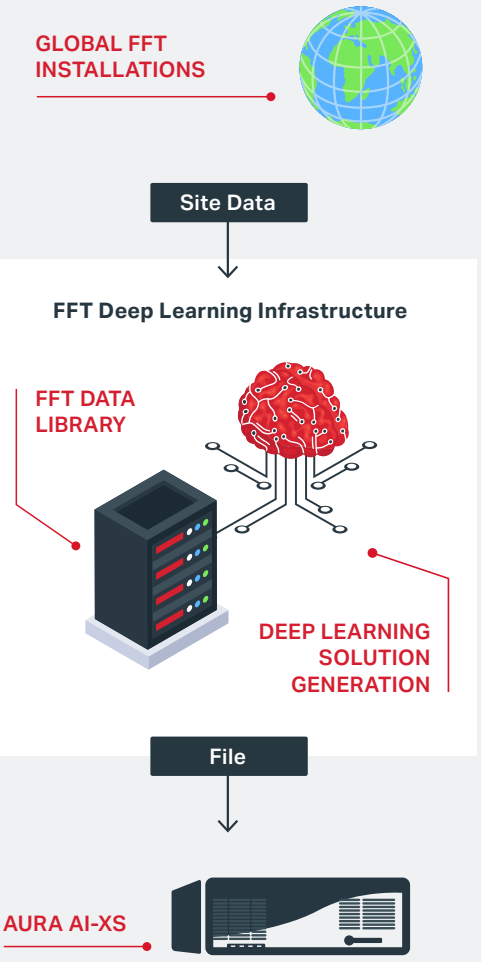
Features

Aura Ai-XS provides fence mounted fibre optic sensing up to 10km (6 miles) (2x5km). Intrusion detection to within ± 2m (6.5ft)
Aura Ai-XSB provides shallow buried fibre optic sensing up to 10km (6 miles) (2x5km). Intrusion detection to within ± 5m (16.4ft)
Real time simultaneous detection on two channels
Cut resilience (immunity) and redundancy
No electronics or power in the field
Intrinsically safe / immune to EMI/RFI and lightning
Compact (4RU) state-of-the-art opto-electronics
Lower total cost of ownership versus alternative technologies
Cyber penetration tested
MTBF >250,000 hours



HOW IT WORKS

Deep Learning



Data from on-site and FFT's extensive global system installations is used to train effective Deep Learning models deployed to an Aura Ai-XS system via encrypted file transfer. The Deep Learning engine in Aura Ai-XS uses this model to perform real-time detection and classification of events monitored on the fiber sensor.

The diverse range of representative data captured in FFT's Data Library is used to train Deep Learning models that deliver high classification accuracy of events leading to a high POD with the lowest nuisance alarms.

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For more information, visit: **www.fftsecurity.com**
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