



# Rail Applications

## Distributed Acoustic Sensing System

“In this project we reduced the form factor from a 4U Dual Xeon System to a smaller 2U platform to meet depth restraints and compliance issues, whilst being able to house the future expansion requirements demanded by the application.”

**Mark Aveson, Sales Manager**

This project is to support the computer processing requirements for a rail application involving distributed temperature sensing, acoustic sensing, and vibration sensing.



### Requirements & Issues

- ▼ 2U short depth chassis
- ▼ Customer branding (chassis colour & logo) to fitting with customer manufactured instrumentation.
- ▼ Thermal footprint 50°C
- ▼ Expansion for 3 full length - 3rd party card in a small footprint rack PC - digitiser card, GPS & GPU cards
- ▼ GPS functionality
- ▼ Operating temp up to ambient 50°C

## The Solution

- ▶ 2U customised branded solution provided
- ▶ Integrated high-end graphics, GPS, & DAQ functionality
- ▶ Customised card retaining solution incorporated using in house & third-party design capabilities.
- ▶ Management of BOM & associated supply chain
- ▶ Thermal compliance achieved.
- ▶ CE certified
- ▶ Customer also achieved EMC certification



## The Outcome

- ▶ Standardised 2U platform – that fits with their corporate brand and applicational needs
- ▶ Option of a 24V dc variant
- ▶ Strong customer/Captec multi contact relationship
- ▶ The units have passed shock and vibration testing



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### EMEA Office

7 Whittle Avenue, Fareham,  
Hants, PO15 5SH, UK

- ▶ +44 (0)1489 866 066
- ▶ [sales@uk.captec-group.com](mailto:sales@uk.captec-group.com)

### North America Office

15 Saltsman Dr. Cambridge, ON.  
N3H 4R7, Canada

- ▶ +1 (519) 650 4000
- ▶ [sales@ca.captec-group.com](mailto:sales@ca.captec-group.com)