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