Technology to Application

An Introduction to AGISEN Limited



AGISEN Limited is an engineering consultancy specialising in the provision of bespoke sensing and measurement solutions and the integration and deployment of COTS technologies into challenging environments.



About Us

We use our experience and apply our expertise to solving challenging applications. Within the company we have in excess of 50 years combined experience working with a broad range of technologies in addition to our core area of expertise of optical and optical fibre sensing technology. During this time we have been involved in single client contracts, and multi-partner collaborative projects involving the aerospace, defence, oil and gas, smart structures and medical sectors. Our combined experience and capabilities enable us to provide innovative solutions based on sound research, prototype development and manufacture. At AGISEN we place great emphasis on quality and all our activities are underpinned by our ISO 9000 based quality management system.





AGISEN

Previous Customer Base



AGISEN

Technology Reviews

- Paper-based: Current Research
- Commercial State-of-the-art Technology
- Testing
 - Technology Feasibility Testing
 - Product Evaluation
- Patent Reviews





Bespoke Solutions



27 channel, dual wavelength, tomography system for combustion measurement in a production engine. Multichannel Oxygen and temperature sensing system based upon fluorescence quenching for aircraft ullage space monitoring





7 channel optical ice sensor design to fit in an aero mounted fix point probe.

AGISEN

COTS Technology Integration



Portable mastisis field measurement kit. Integration of COTS parts into a robust measurement interrogator.



Integrated traffic monitoring camera system. Enables >24hr battery operation providing D1 digitally stored video in a ergonomically designed package.





Vision analysis system to determine the presence of a tube train on a platform in order to turn off a cross-platform projector



Novel Sensing Provision



High temperature (700°C), high pressure 163dBa optical microphone and cabling system for aero-engine monitoring.

Miniature glass microsphere strain sensor mounted on an optical fibre for low profile plastic compression measurement.



end Graph GroupTemperatures Thermocouple Calibrat CIC(c) 21.349 Loop Count 176248 30.0-250-Delay sec Loop Control ON SAMPLE Her & Guard Box Temp 45.0 45.6 455-46.4 45.2-1-23649 Saucle Number



Experimental design to facilitate the measurement of the thermal conductivity to lorry side panels for the asphalt delivery business

Evaluation of fibre Bragg grating performance at elevated temperatures.





Small Volume Manufacture



Optically interrogated tipping water gauge for very high voltage environments. Miniature, 90° turned, dual channel optical fibre displacement sensor for use in a confined access, highly explosive atmosphere



SA80 rifle mounted coded-pulse laser transmitter for use in mine clearance training applications.







Systems Development



Multi-channel, High-temperature, acoustic measurement system for jet engine research





Ruggedised, temperature compensated, Fibre Bragg grating interrogation system.



Aircraft fuel-tank oxygen monitoring system to reduce projectile induced explosive risks on the battlefield

> Integrated laser control and phase measurement system for high sensitivity methane detection.



Specialist Opto-Mechanical Design & Manufacture



Inspection of electrical parts in order to meet Ex compliance, instruments in explosive atmospheres. Compact dual wavelength spectrometer to measure the point of water ingress in a gas pipeline system under live conditions.



Design and fabrication of simple and robust optical fibre output beam collimator for process event detection. Designed for ease of integration into client mechanical assembly without the need for seton-test alignment.





Capabilities

- Optical and fibre optic system design.
- Mechanical design, prototype fabrications and design for manufacture.
- Electronic design, prototyping , manufacturing, testing & evaluation.
- Project Management (single or multiple clients)



Contact and Next Step

Please feel free to contact either:

Dr Tim Litt (tim.litt@agisen.co.uk) or Mr Stuart Murray (stuart.murray@agisen.co.uk)

To discussion your measurement requirements

