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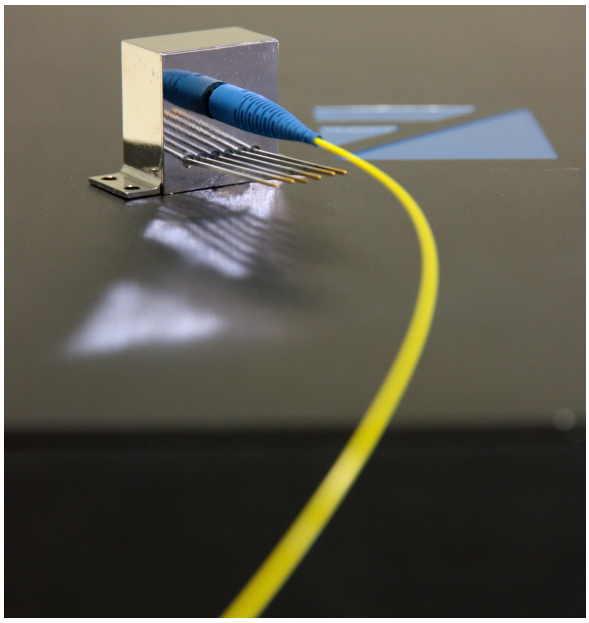
Distributed sensor networks for hazardous environments

ZEDELEF



Safer, better monitoring

Most sensing technologies are electronic in nature, requiring power and signal cables back to a central location where information is processed. These requirements make it expensive and often impractical in hazardous conditions such as flammable or explosive atmospheres such as in mines.

Zedelef was established to commercialise a research breakthrough to address precisely this issue. This breakthrough came in the form of a *optoelectronic* transducer capable of *reading optically* the output of standards electronic sensors (temperature, gas, flow, etc) and transmitting their output via optical fibre for processing.

A single optical fibre can then be used to support (multiplex) up to 80 sensors distributed over many kilometres. In addition the transducer requires no power.

- Distributed sensing networks
- Analog transduction
- Intrinsically safe operation
- Passive operation

If you are monitoring under hazardous conditions – e.g. in a mine, in a petrochemical plant, on an off-shore drilling rig or under water – this **fully patented technology** marries the convenience of standard sensors with the performance of optical networking.

Our industry partners* love it. So will you.

* Thales Underwater Systems, Becker Mining, Ampcontrol

新南威尔士大学火炬创新园区
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