SUCCESS STORY

High Temperature Hybrids for Jet Engine Monitoring

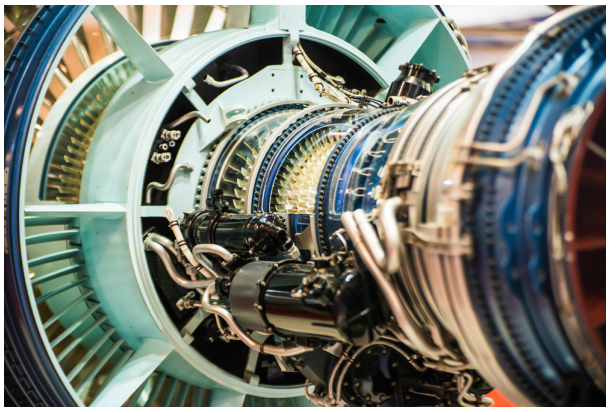
Optimizing engine performance in harsh environments

Combat aircraft engines operate at extremely high temperatures, high pressures and high speeds. Increasing the number of control sensors on or inside the engine improves operational efficiency in very severe environmental conditions. That's where Spectrum Control's high temperature hybrids come in.

Spectrum Control's High Temperature Hybrids help monitor the condition of the engine to reduce aircraft maintenance costs, reduce fuel consumption and improve overall engine management. Sensors operating better, for longer, closer to the engine.

Hybrids from Spectrum Control enable engine electronics to perform for longer, which means more flight hours between swap out/replacement, resulting in lower maintenance costs.

Spectrum Control's High Temperature Hybrids can be placed closer to the engine, improving measurement accuracy and reducing the amount of copper wiring, saving overall engine weight.



Spectrum Control's High Temperature Hybrid multi-chip modules (MCMs) are all manufactured to meet the key Military manufacturing accreditations this market sector demands.

Spectrum Control additionally provides expertise in design, manufacture and testing of critical electronics to optimize the performance and reliability in harsh shock, vibration and extreme high temperature environments.

Operational Advantages

- Extended range of performance – high reliability performance in high to ultra-high temperatures, 150 °C to 225 °C
- Small size & weight
- Environment survivability – high tolerance to environmental shock and vibration at high temperatures
- Expanding capabilities in ultra-high temperature ranges of 175 °C to 225 °C
- More complex electronics to be fitted within a fixed-width requirement
- A qualified range of attachment adhesives and monometallic interconnects suitable for high temperature applications