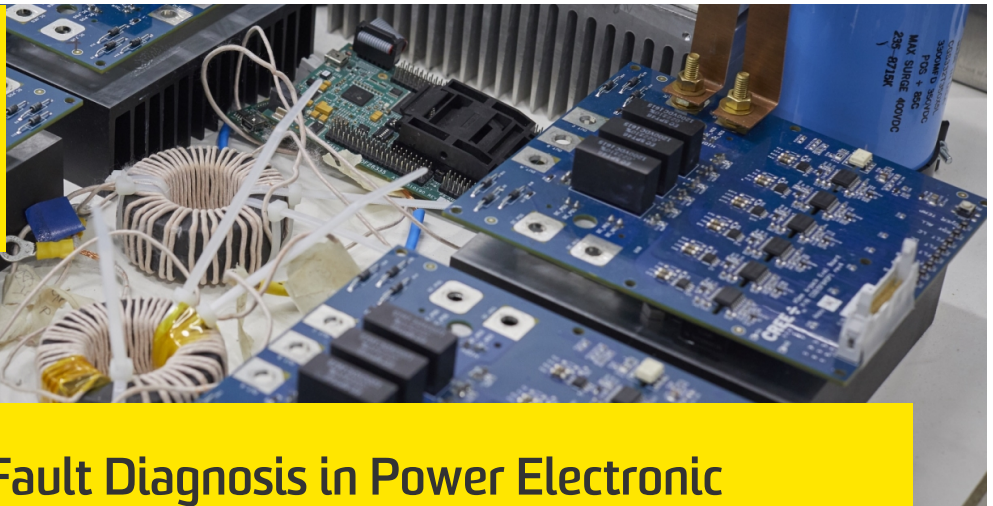




**UNSW**  
SYDNEY



# Methodologies for Fault Diagnosis in Power Electronic Systems Operating in Harsh Environments

**Power electronic systems operating in harsh environments, such as mines, are exposed to extreme temperatures, dust, moisture, hazardous environments, dynamic power loads, cyclic and mobile operation. Methodologies have been developed to diagnose and rectify these faults as quickly as possible in order to minimise potential revenue losses.**

## Competitive advantage

- Development of leading troubleshooting procedures for fault diagnosis
- Innovative, self-aware diagnostic systems for safety-critical drives

## Impact

- Improving the reliability of equipment that operates in hazardous environments

## Successful applications

- Fault diagnosis methods for power electronic systems used in the mining industry

## Capabilities and facilities

- Power electronics laboratory with state-of-the-art equipment
- PV simulators
- Hardware testing capability up to 50kVA, 1kV, 400A
- Arbin battery and supercapacitor tester with environmental chamber

## Our partners

- Austindo

## More Information

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