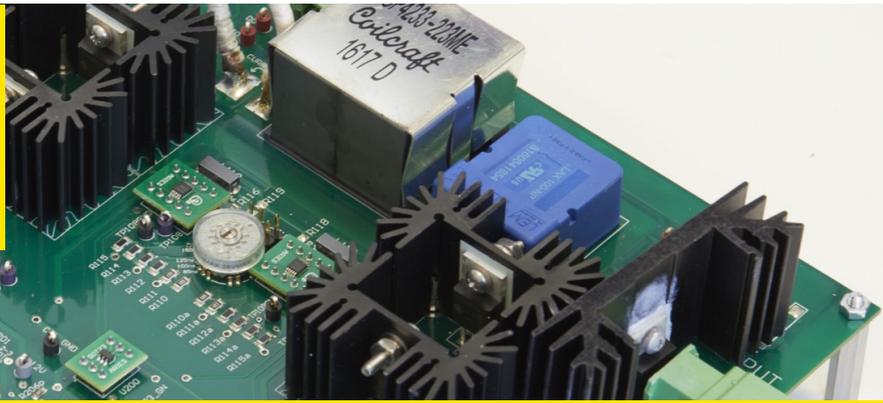




**UNSW**  
SYDNEY



## Photovoltaic Module Power Optimiser

**A low-cost universal converter that can act as either a power optimiser or a micro-inverter for photovoltaic (PV) modules would maximise the energy output of photovoltaic systems by constantly extracting the maximum power from each photovoltaic panel separately.**

### Competitive advantage

- High frequency and intelligent design that can detect potential faults in PV modules and ancillary equipment, thereby avoiding costly downtime
- Allows flexible installation design with multiple orientations, slopes and PV panel types in the same string
- String voltages can be kept constant, providing greater flexibility with longer strings and strings of different lengths to design optimal solar PV systems

### Impact

- More efficient photovoltaic power systems
- Improved safety functionality
- Improved energy yield and reduced energy loss due to shading effects

### Capabilities and facilities

- State-of-the-art test facilities including accelerated testing
- First class instrumentation and measurement
- Prototyping and testing solutions
- Realtime simulation

### More Information

Professor John Fletcher

School of Electrical Engineering and Telecommunications

T: +61 (0) 2 9385 6007

E: [john.fletcher@unsw.edu.au](mailto:john.fletcher@unsw.edu.au)

UNSW Knowledge Exchange

[knowledge.exchange@unsw.edu.au](mailto:knowledge.exchange@unsw.edu.au)

[www.capabilities.unsw.edu.au](http://www.capabilities.unsw.edu.au)

+61 (2) 9385 5008