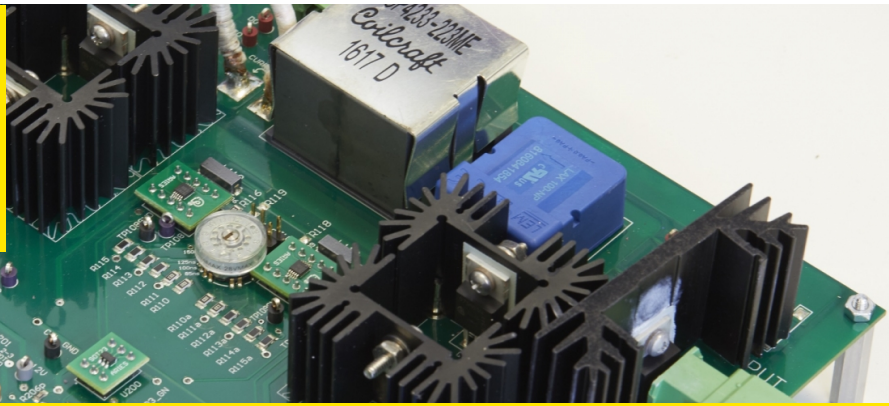




UNSW
SYDNEY



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

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008