

OVERVIEW

The CPS National 'Solar Cube DC' is designed for remote applications where reliable power is essential. Using a combination of solar arrays, battery bank and optional inverter (for AC applications), the Solar Cube DC can be easily deployed as the complete unit includes concrete footings.

TYPICAL APPLICATIONS

Because the Solar Cube DC can be designed with or without the need for a back up generator, it can be deployed in any remote application where reliable power is required for communications and control.

This type of solution would suit:

- Remote communication exchanges
- Level crossing train control systems
- Small radio and fibre communications sites
- Region D cyclone areas

BENEFITS

A Solar Cube DC provides the following benefits:

- Reduced operational expense when compared with traditional generator based solutions (such as diesel generators which typically have high running and maintenance costs)
- Remote monitoring and control functionality via IoT devices and connectivity (surfacing live data and video footage via secure URL or direct to local IT infrastructure)
- Skid mounted design allows for easy relocation and minimises installation time on-site
- Limits or eliminates the need for refuelling or servicing generators

TECHNICAL SPECIFICATIONS

Each Solar Cube DC unit is designed to suit specific load requirements. Typical voltages are 12VDC, 24VDC and 48VDC.

Battery back up requirements can be designed to cover hours to days if required. Additional specifications include:

- Solar regulators are MPPT maximum power point trackers
- Moxa high temp ethernet switch
- High temperature rated
- Sun shields to keep direct sun radiation
- Stainless steel hinges and locks
- 49kWh battery at the 50 hour rate

INSTALL AND COMMISSIONING

All Solar Cubes are tested before installation and commissioned on-site by experienced technicians who hold relevant Electrical Contracting licenses.

To install the cube:

- Dig in the concrete footings, place the cube on the footings and secure with fixings
- Place the batteries into the battery shelves for connections
- Connect to an external fibre or ethernet cable
- The unit is now ready to use.

This process is backed by our accreditation to AS/NZS4801.

