



This Indonesian based mine is one of the largest in the world, operating mining assets with significant copper and gold reserves.



Scope of work and challenge

Power On Australia was engaged to deliver backup power and data capability to support critical underground operations for one of the world's largest gold and copper mines—where continuous communications and monitoring are essential for safe, productive mining.

The environment is exceptionally harsh and high-risk. The installed power systems needed to stand in up to 600 mm of water and withstand exposure to hydrochloric acid, creating a constant corrosion and failure risk.

Operationally, loss of power can stop loaders, compromise ventilation and increase safety risks—potentially requiring dangerous recovery activity underground.

Solution

Power On Australia designed, integrated and tested a tailored solution featuring:

- 48V DC backup power providing 4 or 8 hours runtime to maintain critical communications and monitoring during outages.
- Corrosion-resistant 316 stainless-steel plinth, leveraging Eaton cabinet technology.
- Fibre integration to support rapid connectivity and simplified commissioning.
- In-house FAT testing (plus localised SAT options) to reduce commissioning risk and ensure equipment arrives operationally ready.
- Plug-and-play integration for rapid commissioning without flying specialist engineers to site.
- Maintainability and resilience features including modular design, local indicators/remote alerts, and comprehensive spares to support long-term operation.

Outcomes and benefits

- Backup runtime provides time to move to safe areas and maintain monitoring of critical systems during outages.
- Australian designed, built, tested and integrated solution suited to real underground conditions.
- Plug-and-play design reduces the need to mobilise specialist engineers for on-site setup.
- Commonality of spares across cabinets and factory warranty support.

Client feedback:


“We shift 150K tonnes per 12-hour shift – if we lose power that’s an impact of millions. It’s been great working with Power On Australia. Their knowledge and expertise have given us peace of mind. They know their product.”

Brad McCaskill
Technology Manager

Power On Australia has 23 years experience designing, building and commissioning bespoke power quality and power management solutions. We work with virtually every industry, powering critical infrastructure across Australia, Asia and the US.

No project or environment is too difficult for us – from designing, installing and maintaining complex UPS power solutions on remote mining sites to managing critical power backup solutions in major metropolitan hospitals.

Ask us how we can design a power solution to suit your site's needs.

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