

# H3RO in an Underground Gold and Copper Mine

Ampcontrol was engaged by an underground gold and copper mine in Western NSW, to provide fibre optics quickly after an existing communications cable was severed.

## Achievements

- Fast and simple downtime recovery
- Self-sufficient fibre optic installation by site staff
- Integration with existing fibre optic infrastructure
- Modular, standardised expansion and dynamic networking ability

## About the project

An existing fibre optic cable was severed at the underground gold and copper mine. This optical distribution network (ODN) was vital for mining operations. Production could not be started without dependable and reliable communication with seismic sensors.

Ampcontrol's H3RO, harsh environment reticulated fibre optic solution, was deployed from an existing FOBOT panel for a distance over 1km along the roof, through a number of vertical drops and into another existing FOBOT enclosure.

H3RO's plug and play cables and modular components made it the ideal choice for the fast deployment of cabling for this work. The IP68 connectors and bulkheads allowed a neat, maintainable solution that integrated seamlessly with off-the-shelf IP68 bulkheads and pigtailed to match the existing patch panels.

Due to the modular installation and low loss connectors, network expansion and recovery from similar incidents in the future is now hassle free.

The entire cable run consists of a quantity of four 260m 12 core H3RO cables, making swapping any section out easy, rather than replacing the entire run or requiring expensive and time consuming fibre field splicing in the mines harsh environment.



**+ Fast fibre optic network deployment after existing communications cable severed**

H3RO components are manufactured in state-of-the-art facilities, all items are tested and shipped with quality reports. This offers a more cost effective, reliable and risk free solution to field splicing in an underground mine where constraints such as time, darkness and the dirty working environment all affect the quality of the job.

## Benefits

H3RO's plug and play functionality and modular components enabled installation to be completed quickly by site staff, as opposed to specialist fibre optic technicians. The 260m cables on mobile reels allowed fast deployment from vehicles and fit for purpose bulkheads to pigtailed allowed seamless integration with existing enclosures.

By using H3RO, expensive fibre termination equipment and specialist staff or training is no longer required to maintain the system.

H3RO's modular components and future proof design enables cost effective and quick and easy duplication or extension as ODN requirements evolve.