
Industrial Automation Group

Based in Perth, Australia, Industrial Automation (IA) provides customers in mining, manufacturing, utility, agriculture, irrigation, and shipping industries with innovative solutions to meet their automation and control needs.

Mines Pay for Just What They Need With Remote Monitoring by Sierra Wireless AirLink® Gateways

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BUSINESS CHALLENGE

Working and digging in the vicinity of groundwater can be challenging for mining companies. Massive dewatering pipes are used to extract water from open cut mine pits, with equipment rented at a daily rate. Unfortunately for mining companies, they never know when they might hit groundwater, so the expensive dewatering pipes are kept on-site – often sitting idle – in preparation for the unknown.

To alleviate the burden of daily fees for unused dewatering pipes, Industrial Automation was approached by one of its mining equipment customers to create a solution that would enable equipment usage tracking. This would allow the equipment provider to charge a premium while

also providing its mining customers with the satisfaction of paying only for the time the rented equipment was actually in use.

SIERRA WIRELESS AIRLINK® SOLUTION

IA developed a remote equipment monitoring solution powered by the Sierra Wireless AirLink® gateway. The solution is installed on each piece of field equipment to allow transfer of usage data back to a central location for accurate hourly – instead of daily – charges.

“It’s a breeze to integrate Sierra Wireless AirLink products with third party equipment,” explained Henk de Graaf, managing director at Industrial Automation Group. “We use Ethernet as the backbone, so it’s just a matter of plugging things in; it’s so easy.”

With its compact form factor, the gateway allows remote data collection enabling integration within existing infrastructure and enclosures. The rugged design of the gateway, as well as the wide temperature ranges in which it can operate, ensures it is strong enough to perform in the harsh field environments where industrial vehicles regularly operate.

RESULTS

Because of the remote usage monitoring enabled by IA’s wireless solution, its mining equipment customer has been able to move from a daily rental fee model to a sophisticated new accounting system that allows them to track actual machine usage. This not only allows the customer to accurately charge for usage, but it also allows them to track wear and tear on machines to better plan for service and maintenance. Having the flexibility to provide different pricing plans has also enabled IA’s mining equipment customer to attract clients such as the Boddington Gold Mine, which is the largest undeveloped gold mine in Australia and poised to become the highest producing mine over the next few years.

APPLICATION: REMOTE MONITORING

CUSTOMER CRITICAL CHALLENGE:

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- More efficient use of equipment for extracting water from open mines
 - Required tracking and transfer of equipment usage data from across Australia and overseas

SOLUTION:

- Integrated AirLink® gateways into mining equipment for usage tracking
- Provide persistent high-speed connectivity, remote data transmission, and a rugged design for use in harsh industrial environments

BENEFITS:

- Reliable connectivity for accurate equipment usage tracking and billing
- Ability to monitor usage from equipment spread across Australia and overseas
- Seamless integration with other monitoring solution components
- Improvement in customer satisfaction with payment for equipment usage and reduced idle machine time