



Case Study – Communications System for Mining Industry



## Overview

The critical role reliable communication systems play in the success and safety of any mining operation cannot be overstated. In addition to regularly harsh and dynamic environmental conditions, mining often introduces extremely challenging RF scenarios as well. All of these factors combine to challenge even the most advanced technology and skilled solution design engineers.

PT Indo Tambangraya Megah Tbk (ITM), Indonesia's largest mining company and coal producer chose Altai Technologies Super WiFi product line after evaluating a variety of options to address its need for reliable and extended range communications. ITM was impressed by Altai's remarkable technology, which they deployed at their large mining project in East Kalimantan, Indonesia.

After a detailed site survey by Altai and its local partner in Indonesia, PT.Wahana Piranti Teknologi, a solution was designed using Altai's flagship A8-Ein, A2e and A2. One extremely important benefit of Super WiFi's extended range is the need for far fewer access points compared with standard wifi equipment. And because of the low number of APs, the ITM deployment was completed extremely quickly with minimal disruption to its mining operations.

Once the SuperWiFi network installation was complete, the entire mining site enjoys blanketed wireless access, which has significantly improved site communications and overall efficiencies while also providing a platform for improved worker safety.

### **Customer Name:**

PT Indo Tambangraya Megah Tbk (ITM) Wahana Piranti Teknologi (Distributor)

### **Deployment Location:**

Melak, East Kalimantan, Indonesia

## Application:

WiFi network for mobile operational and CCTV link

### Products used:

A8-Ein, A2e, A2

### Result:

The WiFi network has greatly enhanced the operation of the mining site, but also improved the workers' safety at work as it ensures a reliable communication.

ITM was amazed by the fact that the signal is stable when the mobile device is 1.5km far from the AP.







# The Challenge

- Large area coverage
- Harsh and everchanging environment

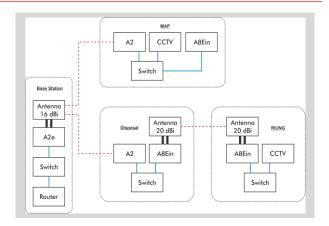


## The Solution

An Altai A2e bridge unit was mounted 80 meters up on a cellular tower for PTMP connectivity from the Mining Base Station to the Site over a distance of 9km. The other A2 bridge unit was mounted 6 meters up on a mobile tower to support the PTMP connection and a CCTV link, while Altai's A8-Ein base station was also mounted on the mobile tower to deliver user wifi access on the mining site. The solution also includes AltaiCare for access & network management.

## The Result

A stable signal for wifi enabled devices with strong throughput even when they are as far as 1.5 km away from the A8 Ein base station. Since completion of the Super WiFi installation the ITM feels the solution has had a positive and transformative impact on their mining site.



## About Altai

Altai Technologies is a leading supplier of carrier-grade Wi-Fi products and technologies with a distribution network reaching 100 countries. Altai Super WiFi is the leading solution for vertical industrial markets, covering over 200 terminal ports and airports globally.

The Altai Super WiFi Solution includes a complete portfolio of indoor and outdoor products for carriers, WISPs, and enterprises to support a wide range of applications such as mobile data off load, public access, WLAN access, and backhaul.

Utilizing patented smart antenna technology, as well as a cloud-based management system called AltaiCare, the Altai Super WiFi Solution is designed from the ground up to deliver WiFi networks that have unprecedented performance, reliability, scalability, and manageability.

### Contact Us

Headquarters

Unit 209, 2/F, Lakeside 2, 10 Science Park West Avenue, HK Science Park, Shatin, Hong Kong

Phone: +852 3758 6000 Fax: +852 2607 4021

Email: info@altaitechnologies.com

www.altaitechnologies.com