

## Altai Enables IIoT Solution for Yokogawa

Case Study – Wireless Network for Smart Water Management System



### Overview

Yokogawa is a leading global provider of industrial automation solutions. It provides a wide range of industrial engineering and IoT services for a variety of industries including oil and gas, chemicals, pulp and paper, pharmaceuticals, and more.

An obvious key component to delivering effective IIoT solutions is reliable wireless network connectivity. Yokogawa has recognized Altai Super WiFi's ability to perform extremely well in heavy industrial environments and selects Altai's product line to provide the backbone wireless network for its complex and mission critical customer deployments.

In this case, Yokogawa deployed Altai Technologies' equipment to support a water management system for a large, premium paper company client's facility in Thailand.

The water management system consists of a number of stations distributed at distant locations with the furthest one 2.2km away from the primary site. Each station is controlled by Yokogawa's, or Siemens' programmable logic controller (PLC), which require a robust wireless network able to provide reliable and wide area connectivity to link the complete IIoT solution.

Despite the long distance between each facility station, only one of Altai's flagship A8-Ein base stations and a compliment of C1n APs were needed to provide the required coverage and connectivity between PLCs.

#### **Customer Name:**

Yokogawa

#### **Deployment Location:**

Rayong province, Thailand

## Application:

Wireless connection for water management system

#### Products used:

A8-Ein (ac), C1n

## Result:

Altai's solution serves as the backbone of the IIoT-based water management system. it provides the critical wireless network linking up the PLC station distributed at different locations and turns the array of machines into a cohesive and connected system.



## **The Challenge**

- Wide area coverage
- LOS issues due to surrounding forest
- Network redundancy with zero down time
- Requirement for scale and cost effectiveness



#### The Solution

Altai's A8-Ein and C1n units were configured to provide both backhaul and network access for the PLCs. Altai's devices were installed at different stations to provide full area coverage and to overcome challenges presented by the surrounding eucalyptus forest. Despite the distances covered and the heavy tree canopy, the single A8-Ein base station has proven more than effective for covering the entire facility and adjacent areas. The inter-communication and central management of the entire system.





# The Result

Altai's solution serves as the backbone of Yokogawa's IIoT water management system. It provides the critical wireless network for linking the PLC station distributed across different locations turning the wide array of machines across the IIoT ecosystem into a fully connected system. The signal strength at each station is excellent and interruption-free fully delivering against the specified requirements



#### **About Altai**

Altai Technologies is a leading supplier of carrier-grade Wi-Fi products and technologies with a distribution network reaching 100 countries. Altai's Super WiFi is the leading solution for the heavy industrial vertical with deployments in mining, aviation, manufacturing, warehousing, power generation, oil & gas and 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 supporting public wireless access, WLAN solutions, backhaul and mobile data off load.

Altai's product line is designed from the ground up to deliver industrial-grade Wi-Fi networks with unparalleled performance. Altai's patented smart antenna technology, interference mitigation and advanced throughput optimization software, along with its cloud-based management platform is what sets it apart with unparalleled range and ability to address the most challenging environments.

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