



Overview

As a major maritime hub handling over 10 million tons of cargo annually and serving over 100,000 cruise passengers per season, the Port of Valparaiso requires robust and dependable wireless communication infrastructure to support its critical operations. Given the port's strategic importance, with over 30% of Chile's foreign trade flowing through its terminals, maintaining seamless connectivity is paramount for the port to remain competitive in today's global supply chain. The diverse activities at the Port of Valparaiso, from container management to passenger services, demand reliable wireless networks to facilitate real-time data exchange, enable mobile applications, and ensure uninterrupted communication.

To address the needs of Port of Valparaiso for reliable wireless connectivity, REDIT, Altai's partner in Chile, has deployed Altai's A8 and A2 series port solutions to provide comprehensive coverage across the port's facilities. REDIT has extensive experience implementing Altai's technology in various ports throughout Chile, making them the ideal partner to deliver a robust and efficient wireless network for the Port of Valparaiso. The Wi-Fi network supports typical container port applications, enabling seamless data transfer, mobile device usage, and real-time communications between personnel and systems. Currently, the port enjoys both 2.4 GHz and 5 GHz wireless coverage, ensuring optimal performance and reliability for the diverse range of devices and applications in use across the facility.

Customer Name:

Port of Valparaiso
REDIT Chile (System Integrator)

Deployment Location:

Terminal Puerto Valparaíso
(Port of Valparaíso, Chile)

Application:

Container Port Applications

Products used:

A8n(ac) and A2

Result:

Altai Super WiFi™ Solution is deployed to provide 2.4 GHz and 5 GHz data transmission with high throughput, high coverage. Cost effective solution minimizes the cost of installation and maintenance.

Business Challenges

- **Connectivity Gaps and Intermittent Coverage:** The port would experience patchy coverage and connectivity issues, especially in sprawling cargo handling areas and remote sections of the port.
- **Unreliable Performance:** Standard Wi-Fi access points often lack the resilience and reliability required for mission-critical port operations. Frequent dropouts, latency issues, and unstable connections could undermine productivity and efficiency.
- **High installation and maintenance costs:** The port would need to deploy a large number of these traditional access points, leading to escalating installation expenses and complex, labor-intensive maintenance requirements.

Solution

- Altai A8n (ac) Super WiFi Base Station provides up to 300 Mbps (access) plus 867 Mbps (access/backhaul for ac model) /300 Mbps (access/backhaul for n model) capacity per base station with up to 3 times the range and 10 times the area of coverage as compared to standard access points.
- Altai A2 WiFi Access Point supports 5GHz data rate of up to 867 Mbps, which delivers a backhaul solution with wire-like throughput and provide 50% larger coverage compared to same-level access points.

Benefits

Altai Super WiFi™ solution provides:

- Ubiquitous coverage, ensuring that personnel and systems remain connected throughout the expansive port facilities, even in the most challenging environments.
- Ample bandwidth, enabling the port to support data-intensive applications and the growing number of connected devices without compromising performance.
- Cost-effective solution reduced maintenance and operating costs compared to traditional access points.



About Altai

Altai Technologies (Altai) is a global leader in providing industrial-grade Wi-Fi solutions with a strong presence in over 100 countries. With our brand, Altai Super WiFi™, we specialize in designing, developing, and marketing cutting-edge Wi-Fi products and technologies specifically tailored for industrial applications.

Altai Super WiFi™ offers fully seamless, secured, and resilient wireless solutions that empower businesses to enhance productivity and operational efficiency throughout the industrial digitalization and automation journey. For over a decade, we have earned the trust of hundreds of industrial customers worldwide. Our cutting-edge wireless technologies are deployed in container ports, airports, warehouses, smart manufacturing facilities, mining, oil and gas sites, power plants, and more.

Discover the comprehensive range of Altai Super WiFi™ solutions which are meticulously designed to meet the rigorous demands of industries with mission-critical needs, please visit our official website at www.altaittechnologies.com.

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