

## Automated Harbor Cranes

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### **Product Solutions:**

[AWK-3121 Series](#)

Industrial IEEE 802.11a/b/g Wireless AP/Bridge/Client

[AWK-4121](#)

Industrial IEEE 802.11a/b/g IP68 wireless AP/Bridge/Client

### **Overview**

In port areas, containers are moved by cranes that were traditionally controlled by cables. Because transporting containers in a port is a mobile application, maintenance problems can easily arise. Therefore, wireless technologies are becoming more and more popular for this kind of application. Using wireless solutions can save the cost of wiring, reduce the possibility of cable damage, and allow the implementation of remote and centralized management.

#### System Requirements

- Wide operating temperature
- Industrial-grade reliability and network redundancy

#### Moxa Solution

Moxa's industrial-grade AWK-3121-T and AWK-4121 wireless access points are ideal for this type of application. One access point that is set to client mode can be placed on the moving arm of the crane. The operator uses a PLC to control the moving arm of the crane via another access point that is set to AP mode. These access points also have a latency period under 50 ms as well as a wide operating temperature range from -40 to 75°C. To increase the reliability of a wireless network, the AWK-3121-T and AWK-4121 also support PoE (power over Ethernet) and two redundant power inputs.

