Hong Kong Science Parks Smart Virtual Fiber® and 4K DH Camera Solution for Safe City





Overview

Smart city is a safe city, where everywhere can be seen clearly. Outdoor surveillance encounters challenges in physical constraints and disrupted connection points that lengthen installation time. The quest for high video streaming quality is putting pressure on reliable wireless transmission.

Hong Kong Science and Technology Parks (HKSTP) is a sprawling 22-hectare waterfront ecosystem that houses more than 600 technology companies and approximately 13,000 technology talents. As a bustling technology cluster in Hong Kong, the Park is devoted to act as the catalyzer in transforming the metropolitan into a world-leading smart city.

With Anywhere Networks' Intelligent COnnectivity Anywhere® technology, HKSTP achieves a rapid deployment of the ideal safe city surveillance system. Network cameras are installed at the exact locations required without the expense and limitations of cabling or wires. Anywhere Networks' Anywhere Node (AN), which provides fiber-like performance, extends connectivity to exactly where video surveillance is needed.

Customer

Hong Kong Science and Technology



Deployment Location

Hong Kong

Application

Safe City—wireless mesh video surveillance

Products Deployed

Anywhere Node X20 series

Competition

Conventional cabling surveillance network suppliers

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The Challenge

- 2-million-square-meter outdoor coverage areas including Phase 1 to 3 and the surrounding Tai Po district
- High interference of over 100 interfering AP and 4G antennas and microwave link around the mesh link
- No cabling between the buildings is allowed
- Need to deploy the network in a short period of time and during non-office hours to minimize disturbance to tenants

The Solution

- A 5-hop wireless mesh ring is built on the rooftops of four office buildings as backbone using X20. The mesh ring is deployed above the two main streets and covers most of the outdoor areas in HKSTP
- As a pilot stage, four cameras (4K resolution) are connected to the network, easily expandable in the future when needed
- The mesh ring network supports up to 2 x 867 Mbps data rate (in 2 paths) back to the surveillance center
- Mesh link redundancy and auto-recovery features are incorporated for highly resilient network structure
- Proprietary Mesh ID and Mesh key authentication supports easy setup yet highly secured connection

The Benefit

- 4K-resolution video enough for distant surveillance over 1 km away
- Simple radio planning, quick setup in days
- Robust in high interference environments



By using Intelligent Connectivity Anywhere technology, wireless surveillance provisioning can be made easy within a short period of time without technical expertise. The 4K video quality is impressive, I just can't differentiate the transmission quality with that using a real fiber.

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Traffic at a critical roundabout can be closely monitored.



Overview of the deployment architecture

About Anywhere Networks

Anywhere Networks develops and globally markets network infrastructure solutions and services for Smart City applications with focus on public safety, intelligently connecting IoT devices and video surveillance cameras for public and private customers. Anywhere Operating Systems, A-OS, and Anywhere Network Nodes, A-NN, offer scalable, high-capacity, secure network solutions based on Anywhere's Intelligent Networking Technology for bandwidth-demanding applications and mission critical network infrastructure. Anywhere Networks solutions and services are well suited for public safety and video surveillance applications for Smart Cities, Safe Cities, Transportation Networks, and Industrial Environments.

Anywhere INTELLIGENT CONNECTIVITY

 $\label{thm:composition} Visit\ www.anywhere networks.com\ or\ contact\ \textbf{sales@anywhere networks.com}\ for\ more\ details.$