



## CONNECTING THE UNCONNECTED

Uninterrupted and reliable connectivity is key element of establish an error proof CCTV Surveillance system. Higher cost involvement and lack of mobility, significantly restrict establishing connectivity with each of the points, high-speed internet and cellular data do exist, but they frequently cost prohibitive and not nearly as capable.

Wireless connectivity with fully powered from Solar renewable energy made complete solution simpler, cost effective, reliable, and secure.



## The Problem

The contractors having trouble to make CCTV surveillance solutions to monitor complete area of Duqm Refinery construction site at Duqm Al Wusta region, Oman. Unavailability of reliable power source, challenges of establishing fiber connectivity through a construction site, movement of heavy vehicles through the path, huge cost of fiber networking, frequent cost, and unreliable cellular/broadband network, put the project in a challenging environment. Considering the facts, establishing a reliable connectivity for error free Surveillance system was unable to achieve.

Several solution providers conducted test and trials with deferent solutions and failed to achieve required output. Where Elite reached to the client and understand requirements and pain areas, we worked with a cost-effective solution to fulfil customer requirements without compromising on reliability and security.





## The Solution

Working closely with multiple clients IT departments, Elite International designed and deployed a custom network that could consistent, stable network connectivity for Surveillance solutions to operate seamlessly.

Elite International engineered a path study from the main station where the all-camera storage and monitoring done, to all the camera points across the large area. Designed 15-meter tower to mount wireless antenna and PTZ cameras in each point, calculated power consumption and designed solar power system to operate complete unit with 24/7 solar power.

To accomplish this, Elite International leveraged several products by Cambium Networks:

**Long distance connectivity | PTP550** was chosen to higher throughput long distance point to point connectivity and installed in an unlicensed band to operate.

**Short distance connectivity | ePMP 300** series Cambium PMP radios were used to facilitate higher throughput short distance connectivity.

**Centralized management | cnMaestro** After thoroughly configuring and bench testing the devices, Elite International installed all the equipment's in designated points, the team worked diligently to align every radio to ensure peak operating efficiency and began to monitor entire system using Cambium Networks cnMaestro software.





## The Result

Thanks to the suit of purpose build hardware and software, all parties from the client end were able to operate CCTV surveillance system, with high quality uninterrupted video streaming.

With **cnMaestro** software, there were able to monitor complete connectivity from a single point.

Staying within budget, Elite International successfully implemented and handover the project, within limited time schedule.



## Keys to Success

- 1 Top-Shelf Tech** – Due to the harsh environment and distant location, hardware repair can be dicey, costly proposition. Thus, it was vital that Elite International selected Cambium Networks products, who known for durability and resiliency.
- 2 An ‘Engineered’ Solution** – Elite International experienced team of engineers partnered directly with IT department of deferent entities to develop a successful strategy. Working in concert, we designed a quality network and brought it to life with affordable, robust, and outstanding cost-effective system.
- 3 A Balanced Budget** – Elite International knew that pricing would be the major concern, previous proposals either requires too much initial investments or charged above-average monthly fees, but we also knew that rolling out a sub-standard, “cheep” solutions would jeopardize our long-term client relationship. However, by deploying a powerful, steadfast network and staying within budget, **Elite International** successfully demonstrated its value.



## Why Elite International?

With more than a decade experience in the field, Elite International is the leading Wireless communication provider in Sultanate of Oman. We align with world class manufactures to deliver products, Service, and Solutions for Utility, Energy, Education, Health, and Industrial verticals.

Oman is geographically challenging place to design and implement wireless connectivity solutions, where Elite International able to deliver solutions and fulfil customer requirements

It is our privilege to be the Connected Partner for Cambium Networks to design, Implement and maintain world class products and solutions to our customers across the Sultanate.

Wish to know more about our product and solutions? We we'd love to hear from you! Reach us on: MOB +968 72344414, Tel. +968 24783137, +968 24783194 [info@elitesystemsme.com](mailto:info@elitesystemsme.com) | [www.elitesystemsme.com](http://www.elitesystemsme.com)

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