



REMOTE BROADBAND FOR MOBILE CONSTRUCTION OFFICES

IN PARTNERSHIP WITH ADVANTECH





INTRODUCTION

When you have a requirement to support a temporary office location with all the broadband connectivity of an office, a scalable and secure broadband connection is required. A zero touch provisioning cellular router, requiring nothing more than a local power source will provide all your remote workers with seamless and secure connectivity.

SYSTEM REQUIREMENTS

Customer needed a highly mobile, rugged and secure network connectivity solution with ease of deployment at remote sites. Only 4G LTE radios could provide such costeffective connectivity at the time. The device needed to provide ethernet and wireless local connectivity and the communications link must be secure back into the corporate remote network and offer the possibility to scale depending on the number of users at the remote location.

SYSTEM DESCRIPTION

The solution involved using Advantech's industrial cellular router ICR-2431W in conjunction with a 3rd party load balancer to provide a wireless broadband connection to the corporate headquarters no matter the location of the temporary construction location. Monitoring of connectivity and performance of communications was enabled with the inclusion of Advantech's WebAccess/ DMP router monitoring application.

- Zero touch deployment not requiring any technical knowhow, just add power.
- Dependable network coverage over a geographically diverse mix of remote construction locations.
- Secure and encrypted connectivity to the corporate head office extending the network.
- Monitoring of network performance, data usage analysis to prevent exceeding usage fees.



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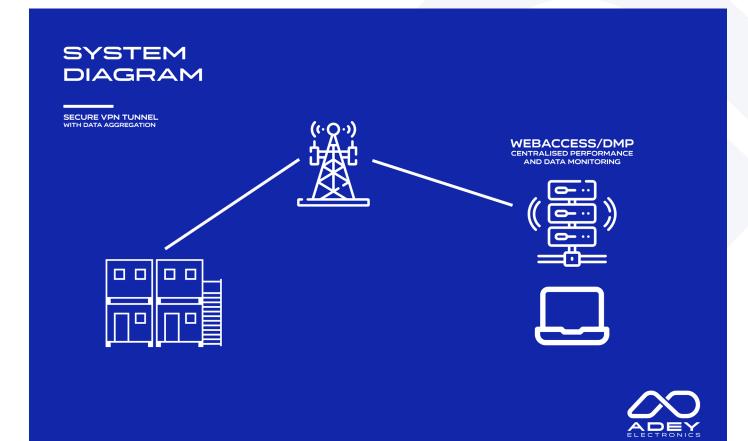
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PROJECT IMPLEMENTATION

- ICR-2431W wireless Industrial Cellular Router for low-cost remote connectivity
- WebAccess/DMP application providing network performance monitoring
- Integration with 3rd party network load balancer to scale the network bandwidth as required.



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CONCLUSION

Advantech's Industrialised Cellular Router was selected by the customer because of:

- A future proof wireless communications architecture.
- Reliable communications with automated cellular radio connectivity and fail over between 4G LTE, 3G UMTS and 2G GSM. Dual SIM cards providing for multi network operator coverage.
- Centralised device monitoring and alerting solution provided by WebAccess/DMP across 100s of devices to help manage data usage.
- Scalable broadband connectivity opening the doors for future services.

WHY ADEY & ADVANTECH?

- Cost effective device and operation
- Superior reliability
- Centralised management and monitoring

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ABOUT US

ABOUT ADEY ELECTRONICS

Adey Electronics are a UK based Value Added Distributor and Solutions Partner for Advantech and other major global IoT manufacturers. They specialise in 5G/4G Routers, Antennas and Industrial Connectivity Solutions, making your journey through M2M & IoT simple, reliable and cost effective.

ABOUT ADVANTECH

Advantech is a major global supplier of industrial computing, communication and sensing platforms and solutions. It offers a range of communication and edge computing platforms capable of connecting to 5G, LTE, 4G and other wireless networks, together with solutions for AI training and edge inference, machine learning, computer vision and HMIs. Headquartered in Taiwan, and with offices and service centres in several European locations, Advantech is actively involved in a number of early 5G projects in the transportation, infrastructure and smart factory sectors.

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