AirLink® XR80 Fixed Utility Infrastructure
INCREASING RENEWABLE POWER INTEGRATION, GRID SAFETY, AND GRID SECURITY
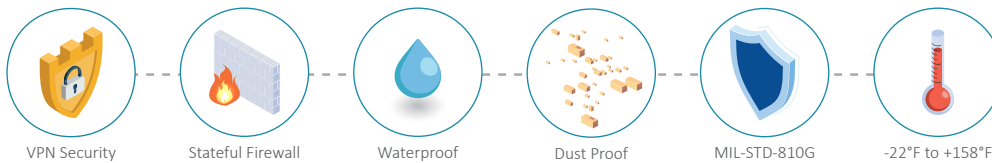
Meet Kyle

Kyle is a Senior Operations Engineer for a large regional electric utility. Kyle has been tasked with leveraging 5G to improve utility operational efficiency, safety and security. It also falls to him to implement new networking technologies that will speed up the integration of sources of renewable energy into the existing power grid.

The Challenge | Increase Grid Automation, Safety, and Security Wirelessly

Running wires or fiber optics to control grid automation components is expensive, especially in remote or otherwise difficult to access locations. Using reliable cellular connections lowers the cost of adding automation, significantly reduces the time to install automation, and increases system flexibility. With new 5G bandwidth and latency improvements, Kyle is looking to install wireless automation systems that meet response time and reliability requirements.

The Solution | Install XR80 5G Routers and Ultra-Wide Band LTMWG Antennas

The AirLink® XR80 cellular router delivers Gigahertz communication speeds and extremely low latency and can detect and isolate faults in milliseconds. Leveraging the XR80's edge compute capabilities and supercharged hardware further reduces response times. AirLink XR80 routers are easy to install and easy to monitor using AirLink Management Service (ALMS). Each router is purpose built for rugged environments with IP64 rated aluminum die-cast housings that meet MIL-STD-810G standards. And with AirLink Connection Manager the XR80 delivers end-to-end VPN security to protect the power grid. Every AirLink XR80 can be configured to run within a private network, further increasing the reliability of the wireless connections. And when paired with Mobile Mark ultra-wide band LTMWG 900 series antennas receive excellent 5G LTE signal strength and optional robust Wi-Fi coverage.

VPN Security	Stateful Firewall	Waterproof	Dust Proof	MIL-STD-810G	-22°F to +158°F

The Results | Simplified Installation, Lowered Costs, and Increased Flexibility

The utility can now easily expand the use of automation to increase grid reliability and safety. It improves the utility's Feeder Automation (FA) systems simplifying integration of renewable energy into the grid. And with the flexibility of the AirLink XR80 routers and Ultra-Wide Band Antennas, Kyle can quickly add additional controls without the immense costs associated with adding communication cables or fiber.

The Team | Device Provisioning, Activation and Installation Services

For over 25 years USAT has provided expert IoT connectivity solutions to electric utilities. Our team provides outstanding support for every aspect of your mission-critical fixed and mobile connectivity projects. The solutions engineers we employ configure, provision, kit and ship your devices hot and ready for immediate use. And when you utilize our installation services, our techs ensure your devices are functioning securely, reliably, and at peak performance.

IT Department — 4G / 5G LTE — Secure Cloud — LTMWG — AirLink XR80 — 5x4 Wi-Fi — Dual SIM — Dual Radio — Up to 4.14 Gbps — ALMS — 5G Ready

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