

# FREEWAVE

## ZUMLINK FAMILY OF RADIOS

# Solution Profile

FreeWave's ZumLink™ Family of Radios support connectivity for data backhaul and a more intelligent edge.

### About FreeWave ZumLink™ Family of Radios

FreeWave's ZumLink™ family of radios are made for secure collection, transport, and data control in rugged industrial environments. It provides a long-range, low-power solution for remote wireless communications - with capabilities you can seamlessly add as your IIoT requirements evolve.

ZumLink radios are ideal in Field Area Networks (FAN), systems, and smart metering devices like those used in oil and gas, precision agriculture, water/wastewater, smart cities, and utilities, and deliver advanced features to maximize the performance of virtually any M2M, SCADA, or IIoT application used today or in future operations.

### With ZumLink™ Family of Radios, You Can:

The ZumLink™ family of radios operate in the unlicensed 900mHz spectrum and utilize Frequency Hopping Spread Spectrum (FHSS) technology for cyber-secure data transfer with RF link rates up to 4Mbps. Performance is further enhanced by FreeWave's Network Accelerators, which use techniques like packet compression, packet aggregation, forward error correction, and Adaptive Spectrum Learning to maximize networks throughput, efficiency, and reliability.

### Challenges:

Today's utility providers are challenged with addressing the needs of growing populations in an increasingly connected world. To meet these new requirements, providers need robust infrastructures that support wireless machine-to-machine (M2M) data transmission to improve processes, detect real-time issues, and address service requests without direct employee-customer interaction. They also need future-ready communications tools to meet their needs today and into the future.



## FreeWave ZumLink Family Solution Results

### A Leading Electric Company in Mexico

A leading electric company responsible for the generation, transmission, and distribution of power and energy to nearly 100 million customers, needed support to implement a Field Area Network for their advanced metering infrastructure (AMI) to read meters and disconnect/reconnect without direct employee-customer interaction.

The electric company made incredible advancements toward increasing its footprint by building a robust Field Area Network for their AMI infrastructure using FreeWave's ZumLink™ family of radios.

With FreeWave's ZumLink™ family of radios, the electric company could provide higher throughput, longer distances, lower latency, work in congested RF cities to provide reliable and secure connectivity to remote AMI data collectors utilizing 3rd party Mesh metering technologies like Zigbee, WiSun or LORA. This implementation validates the use of Zumlink family of radios for Critical Infrastructure networks in Utilities, Water, and for any City, State or Countrywide industrial application.

FreeWave's network design, purpose-built solutions, and ZumLink Intelligence enabled them to collect, transport, and control data in rugged industrial environments. With FreeWave's technology, they can also accurately pinpoint issues, direct maintenance efforts, and restore services in real-time virtually - and they can do all of it despite any potential connectivity issues.

To date, the electric company has deployed several hundred ZumLink radios enabling them to realize additional data rate capacity and more edge intelligence in their network infrastructure.

With FreeWave ZumLink Intelligence, they will continue to have a better understanding of their overall system health. Comprehensive system health visibility helps them improve energy management and efficiencies and reduce their costs and customers' costs.

