



## TUNET AMI FOR RURAL ELECTRIC COOPERATIVES: A SCALABLE, COST-EFFECTIVE, AND FLEXIBLE AMI SOLUTION DESIGNED FOR COOPERATIVE UTILITIES WITH PLC INVESTMENTS

### BENEFITS OF PLC TO AMI MIGRATION:

1. Industry leading coverage in challenging terrain
2. Leverage access to energy data to enhance value across all utility departments
3. Increased ability to deliver pro-active customer service
4. Flexible design options with immediate access to advanced AMI applications – can be simultaneously deployed – before PLC reaches end of life

The challenges faced by rural electric cooperatives (RECs) across the country are often centered on the utility’s ability to reliably and cost-effectively provide service to all customers over vast, and often challenging terrain. Technologies such as Advanced Metering Infrastructure (AMI) are now available to help utilities better address these challenges through applications that deliver improved operational efficiency, better visibility of system operations, and increased responsiveness to events such as outages.

TUNet - the Tantalus Utility Network - empowers utilities to immediately take advantage of operationally efficient AMI advanced applications at their own pace. TUNet’s flexible deployment options present a measured, practical approach in the migration toward smart grid allowing utilities to strategically deploy AMI to address needs in specific geographic locations or as prioritized by ROI.

TUNet offers multiple deployment scenarios so utilities can choose the path that best suits them:

### TUNET CAN OPERATE SIMULTANEOUSLY WITH EXISTING PLC SYSTEMS, ALLOWING IMMEDIATE STRATEGIC DEPLOYMENTS OF ADVANCED APPLICATIONS AT A MUCH LOWER ENTRY COST.

#### IF YOU CURRENTLY HAVE A PLC SYSTEM IN PLACE, ASK YOURSELF:

- CAPACITY:** Can my old PLC network deliver data quickly enough to support applications such as distribution automation, dynamic pricing, and prepay?
- COST:** Can I afford to wait until my system cracks under the strain of increasing demand?
- COVERAGE:** Is there a way I can achieve full system coverage with a partial investment?
- CONTROL:** How will my one-way system deliver timely data to make real-time decisions?

Tantalus offers a unique approach to smart grid. Unlike other solutions, TUNet is designed to offer maximum flexibility and utility choice in the financial justification, design, and implementation of technology adoption in order to help utilities identify their most advantageous next step from traditional one-way AMR. TUNet is designed to be strategically deployed based on specific business drivers as determined by each utility.

### MEASURABLE AND PREDICTABLE PAYBACK

TUNet is designed to maximize utility deployment flexibility. Deploy as quickly or as paced as resources or the business case allow. Speed payback and streamline operations by integrating advanced applications onto a single TUNet platform.

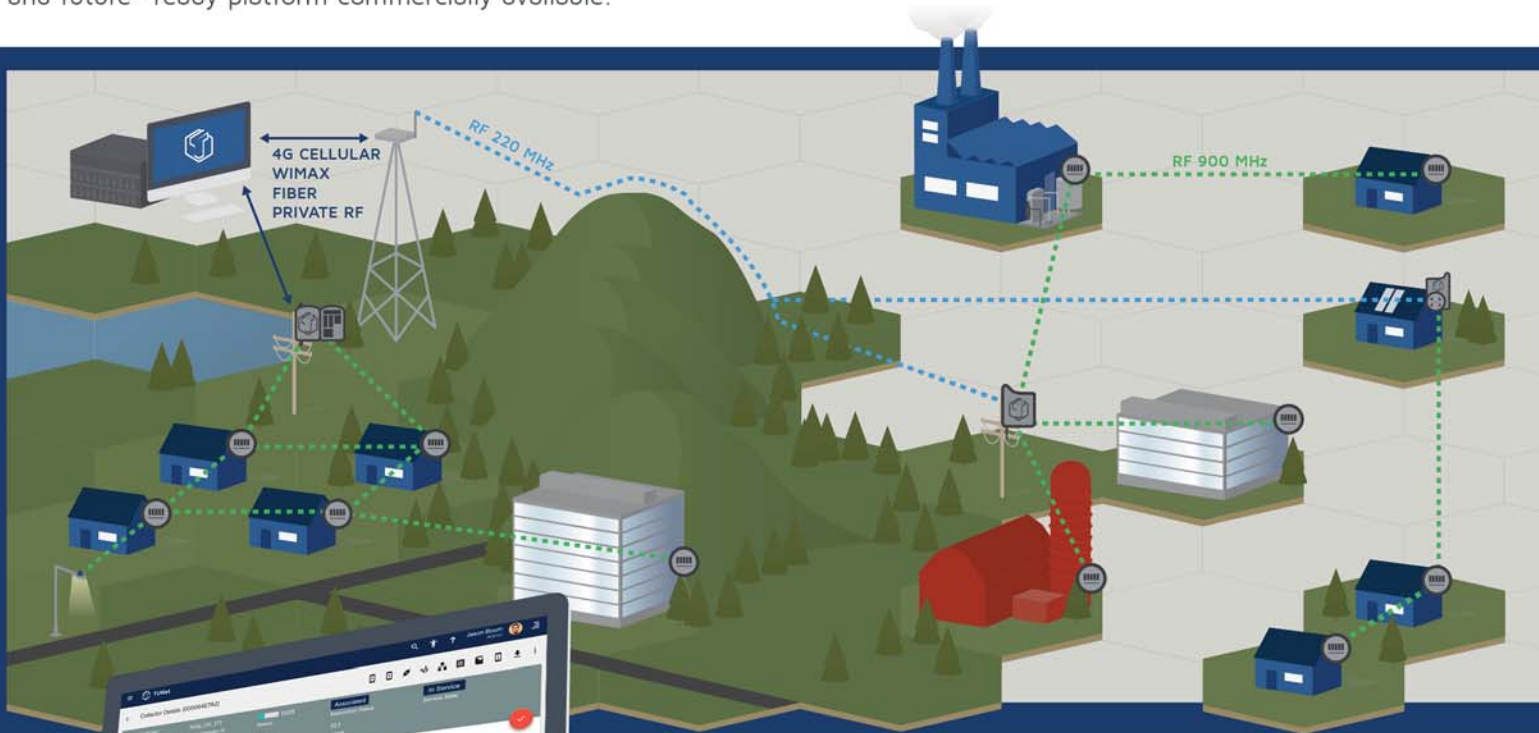


# TUNET: SMART GRID FOR PUBLIC POWER UTILITIES

The Tantalus Utility Network (TUNet®) is an award-winning technology platform with more than a decade in field-proven performance over some of the continent's most challenging terrain. TUNet's flexibility, performance, and functionality are unmatched – it is the most customizable AMI solution available. Tantalus works with your utility to strategically deploy TUNet enabled meters to support advanced AMI applications where they can add maximum value.

Tantalus ensures full and cost-effective connectivity and coverage – particularly in rural, mountainous, or remote service areas common to cooperative landscapes. TUNet works by leveraging the optimal combination of IP-based communications (e.g., Fiber, WiMAX, WiFi), ultra long-range 220 MHz, and 900 MHz wireless RF. With powerful, integrated distributed computing power and TRUPush™ command & control technology embedded at the endpoint, TUNet is the most intelligent and future-ready platform commercially available.

TUNET + REC DEPLOYMENT



## Solution Features

- Total integrated smart grid and advanced applications platform
- Ultra-long range wireless 220 MHz RF WAN to cost-effectively reach end of line meters
- Hybrid network design supports 220/900 MHz RF, IP, Fiber, WiFi, WiMAX
- Integrated TRUPush™ technology for field-initiated event notification (tamper, outage, restoration)
- Multiple low-cost network extension options
- Supports dual system operation with existing PLC network
- Supports pro-active outage management
- Supports remote connect/disconnect under glass
- Supports net metering, prepaid, and Distribution Automation
- Seamless integration with Itron MV-RS®
- Integration to billing via MultiSpeak®, MDMR, and file exports
- Automated daily and hourly interval reads
- On-demand reads for electric, water, and gas
- Enables advanced conservation through enhanced water and gas leak detection

*Finding an affordable AMR to AMI option like TUNet that reliably delivers real-time information in support of advanced applications has been the key for us to address rising peak demand and ultimately, keep rates low for our members."*

Sean Middleton, Manager of Engineering, Illinois Rural Electric Cooperative



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