

TRUSense Gateway™

To modernize and digitize the grid, you have to harness the power of data not only from the substation to the meter, but also access devices located behind the meter. TRUSense Gateway™ is a multi-purpose device that creates a secure utility communication path into the premise to extend the edge of the grid to include behind-the-meter DERs.

Description

The TRUSense Gateway is one of the most valuable solutions in the Tantalus Grid Modernization Platform (TGMP™). The edge of the grid has moved to behind the meter, and without the TRUSense Gateway, utilities are flying blind without mission-critical data.

The TRUSense Gateway accelerates grid modernization for utilities of all kinds by delivering broadband data connectivity all the way to edge of the grid, including behind-the-meter. It's installed in a standard meter socket, between the socket and the meter, and delivers:

- Streaming substation-quality grid-edge power measurements
- Power quality issue detection, waveform capture, diagnosis and mitigation
- Vendor-agnostic approach to DER integration
- AMI infrastructure for electric, water and gas metering
- Connectivity available via Fiber, Ethernet or Cellular

More and more utilities are turning to TRUSense Gateway to achieve a cost-effective way to harness the power of data and enhance the reliability and resilience of their distribution grids.

Applications

The TRUSense Gateway represents a first-to-market offering that supports the convergence of four major initiatives across the utility industry:



Delivering next-generation AMI by accessing the benefits of AMI 2.0 without having to replace existing metering infrastructure



Providing grid optimization by capturing and analyzing granular power quality data to improve the distribution grid and prioritize infrastructure that needs to be upgraded

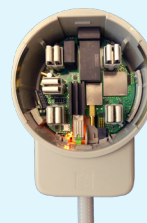


Integrating DERs located behind-the-meter, such as electric vehicle chargers, solar and storage inverters and smart appliances

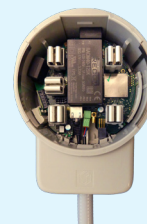


Enhancing broadband initiatives by leveraging fiber investments to connect meters for communications and powering optical network terminals delivering broadband services to the home

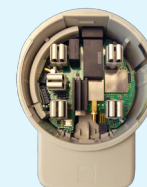
In short, the Tantalus TRUSense Gateway makes it easier for utilities to become more reliable, resilient, and innovative.



TRUSense Fiber Gateway:
Connects directly to fiber by use of a Small Form-factor Pluggable (SFP) Optical Network Terminal (ONT)

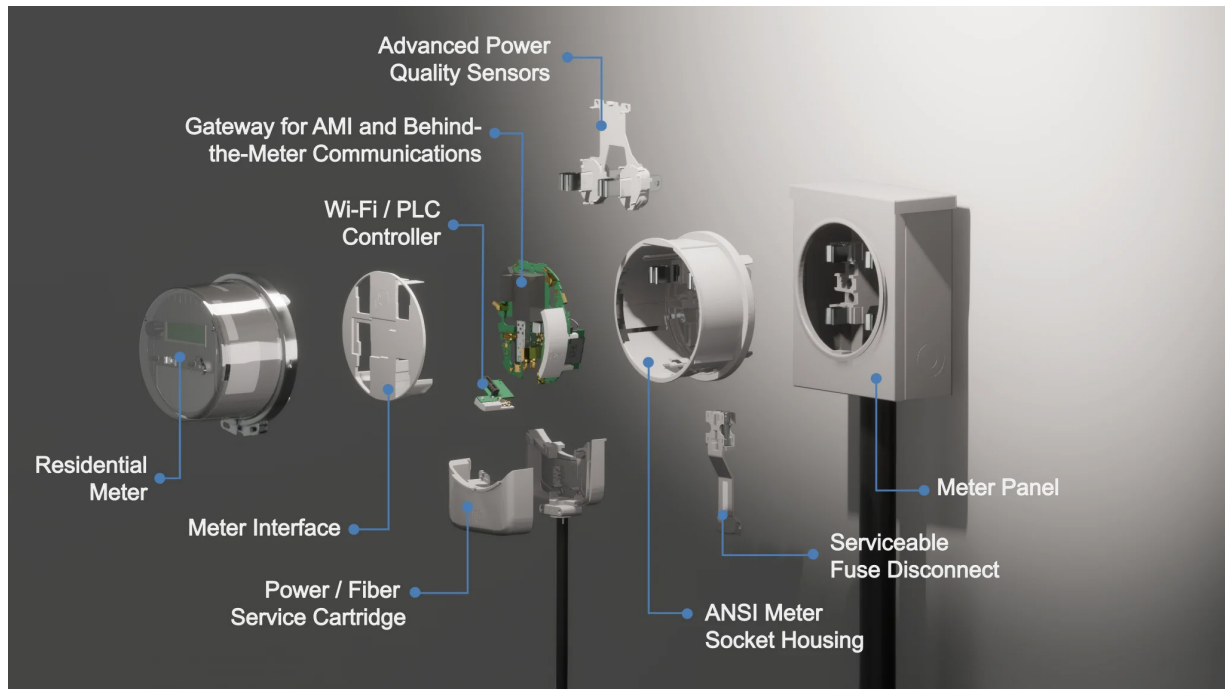


TRUSense Ethernet Gateway:
Supports an outdoor ONT deployment (providing power to the ONT and connecting via an ethernet cable)



TRUSense Cellular Gateway:
Leverages an embedded LTE modem for those utilities not deploying fiber to the home (FTTH) to leverage public or private LTE for AMI and/or DER integration

TRUSense Gateway™



Benefits

- Deploy a next-generation AMI system without needlessly ripping and replacing existing meters. Specifically, we help utilities extend and augment existing AMI and AMR investments—including electric, water and gas—to provide a foundation for future innovation and insights at lower costs.
- Create a secure utility communications path into the premises using the same standards-based technologies that control consumer-centric DERs and appliances to build demand-side programs to offset peak demand.
- Monitor power quality at the socket, providing substation-level power quality sensing and measurement to track transient power events and local conditions such as sags, swells, outages and even phase information.
- Provide real-time communications over fiber and cellular networks, allowing utilities to avoid truck-rolls while gaining a granular view of the distribution network.

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Harness The Power of Data and Modernize Your Distribution Grid

Tantalus is a technology company dedicated to helping utilities modernize their distribution grids. We help our customers harness the power of data across all their devices and systems deployed throughout the entire distribution grid – from the substation to the EV charger. We offer smart grid solutions across multiple levels: intelligent connected devices, communications networks, data management, enterprise applications and analytics.