

Niagara Metering Gateway 1.0



Overview

Tridium's Niagara Metering Gateway 1.0 is a web-based metering management tool that allows you to quickly and easily network pulse or smart energy meters together to facilitate the aggregation of data to an enterprise-level solution. The Metering Gateway communicates with any Niagara-based or oBIX-compliant energy management application, enabling users to process and display data using most enterprise solutions.

The heart of the Metering Gateway is the advanced IP-based controller that eliminates the need for on-site PCs or thick client software. The Niagara Metering Gateway enables tiered access for administrators and operators to manage credentials, meter configurations, trend data, and monitoring alarms via a web browser interface from anywhere.

The Metering Gateway is built on the Niagara^{AX} Framework, the industry's leading automation infrastructure platform. This allows integration with any energy monitoring equipment via common networking protocols such as LonWorks or Modbus as well as support for enterprise connectivity through oBIX or the Niagara Fox protocol.

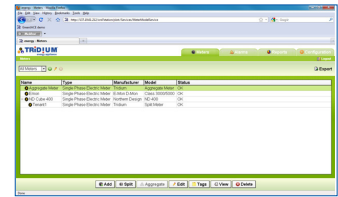
Features

- Simple user interface allows networking and data management of energy meters by installers who are not Niagara-certified
- Step-by-step Guided Wizards that make commissioning hardware, field buses, and metering devices quick and easy
- Support for a variety of Electric, Flow, and Gas meters
- Meter tags allow data to be classified in multiple custom categories, such as by Tenant or Floor, to create reports that organize data in a way that reflects how energy is actually consumed
- Web-based energy management controller – easily accessible via a web browser anytime, anywhere
- Connectivity to any enterprise facility or energy management systems via oBIX or the Niagara Fox protocol
- Built on Tridium's highly successful Niagara^{AX} Framework, the industry's leading facility management and automation software platform
- Virtual meters can be created from aggregating multiple meters, or by splitting a meter by percentage or square footage
 - » Calculates values from metering device outputs using application algorithms that derive standard energy information, such as "real power," "reactive power," "current average" and more.
 - » Appliance manages complex meter register manipulations providing the user instant access to useful data. Removes the need for manual data computation
- Web User Interface serves live data as well as historical trends to a browser
 - » Alarms can be created on any data point and managed in custom alarm groups
- Custom reports in table or chart format with exporting capability in common formats such as .CSV and .PDF
- No thick client software required

Application Highlights

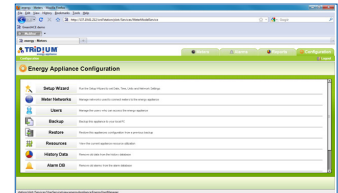
Browser Based Interface

The Metering Gateway is designed so that system configuration, data monitoring, and alarm management are all available using any standard browser – no special software tools are required. This web-enabled technology allows remote access to energy management data and alarms.



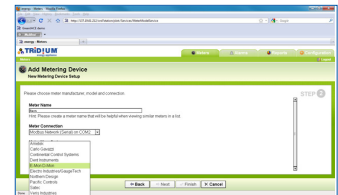
Configuration Wizards

Guided configuration wizards allow set up of all administrative aspects of the product, from user access and permissions to IT connectivity settings.



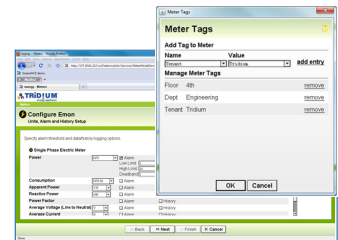
Network and Device Management Wizards

Guided wizards allow quick and easy installation of field buses and metering devices into the Appliance, without any special software tools or certifications.



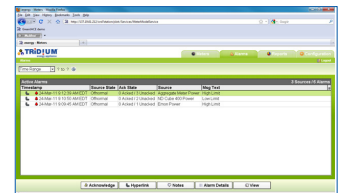
Data Management

Trending can be captured for any data point in any connected meter. Meter data can also be tagged with custom labels to help organize the data to reflect how energy is actually managed. Virtual meters can also be created from aggregating multiple meters or splitting a meter based on percentage or square footage.



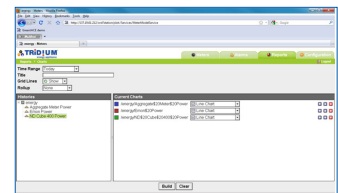
Alarm Management

Custom alarms can be set up for any data point in any connected meter. The alarm console interface also allows acknowledgments and comment logging.



Custom Reporting

Reports can be generated on the fly as graphs or tables, and exported to many common file formats such as CSV or PDF.





Resource Management

Keep track of how many hardware resources are being used and set alarms to warn when resources are getting low.



Ordering Information

Energy Appliance Products

Name	Part Number	Description
JACE-2-XPR w/ Metering Gateway 	T-EA-202-XPR-24	JACE-2-XPR with built-in power supply and local I/O preloaded and prelicensed with Metering Gateway v1.0
Energy Workbench SETUP	T-EA-WP-SET-AX	PC Workbench tool used to load new meter templates to Appliance or reload Appliance in case of software corruption.
16 Remote IO 	T-IO-16-485	Includes 8 Universal Inputs, 4 Form A Relay Outputs, and 4 0-10 VDC Analog Outputs Contains removable screw terminal connectors, and status indication LEDs. Intended for DIN rail mounting. <i>Note: Up to 16 remote IO-16-485 modules max per JACE (limit of 4 on a JACE-2 and JACE-202-XPR).</i> Manufactured in the USA.
LON® Card	NPB-LON	78 Kbps FTT 10 A LON® adapter. Uses the communication slot in the JACE- 2-XPR. Manufactured in the USA.

Specifications

Field Bus Protocols

M-Bus(Serial), M-Bus(TCP/IP), LonWorks*, Modbus(Serial), Modbus(TCP/IP), Local I/O, Remote I/O(NRIO module)

Enterprise Connection Protocols

Fox (Niagara Web Supervisor), oBIX

Meter Devices Supported

Please see "Niagara Metering Gateway 1.0 Supported Meters" documentation

Platforms Supported

JACE-2-XPR

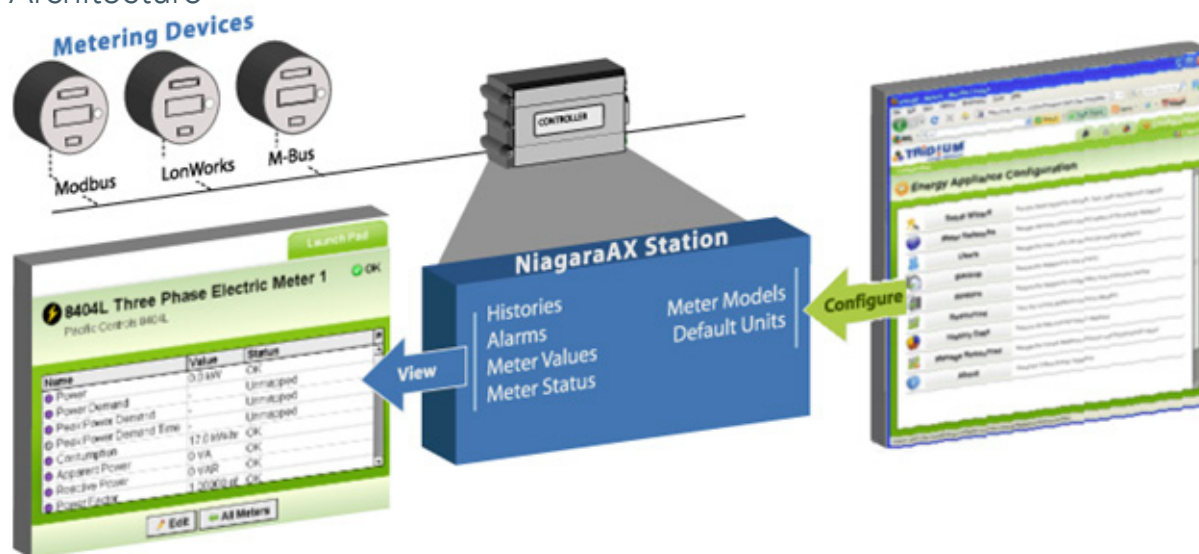
History entries per point

500 (configurable)

*LonWorks requires purchase of LonWorks option card, sold separately

Supported meter manufacturers and models are updated continually. For the current list, download the Energy Appliance Meter List from Niagara-Central.com.

Architecture



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