STANDARD KIT



The Most Powerful, Configurable, Multi-Compatible solution to the Water and Gas data acquisition problem.
Real-Time, Hi-Resolution, Non-Invasive.
Orders of magnitude more granular than utility data.
The 'One' solution for every utility and data protocol.

Without plumbers, or cut pipes, or fiddling for months with utility or plumber schedules.
Without disruption to metering, plumbing, tenants, or your project.

Applications

- For dry and wet environments
- Whole building applications
- Projects requiring hi-res or hi-frequency data
- Disruption-restricted locations
- Approved for secure / government locations
- Digitizing old and new meters without replacement
- Baseline studies
- LEED and other Efficiency programs
- Cost and usage tracking
- Leak and anomaly detection
- Building security and oversight
- Research and development
- Continuous and Ongoing Commissioning



Features

- Non-invasive, non-utility water and gas data
- No plumber or cut pipes
- No utility involvement, delay, or cost
- No disruption to building, tenants, or project
- No special skills to install
- Compatible with all pipe and meter sizes
- Compatible with >95% of installed utility meters
- Highest data Granularity / Resolution available
- Secure Data
- MQTT, Modbus-TCP, Modbus RTU, HTTP Publish, Pulse, or Data logging. (*more coming*)

Building owners and facility managers require building Water and Gas usage data to track costs, detect anomalies and leaks, oversee operations, to improve efficiency, for boiler upgrades or baseline studies, and as required by certifications such as LEED and regional regulations.

Plumbed utilities, Water and Natural Gas are not like other tracked variables.

Until now usage tracking cost thousands in plumbers and disruption to building operations, off-hour installation, and weeks or months delay.

This is disruptive to project flow, requires property managers to participate in project coordination of multiple site visits, is expensive, and results in low-quality, “dirty” data.
A movie we have all seen before.

Vata Verks leverages the meters that already exist in the building, eliminating hardware, and specialized installation. The sensor simply straps to the side of the Water or Natural Gas meter and is able to resolve hi-resolution, real-time flow information.

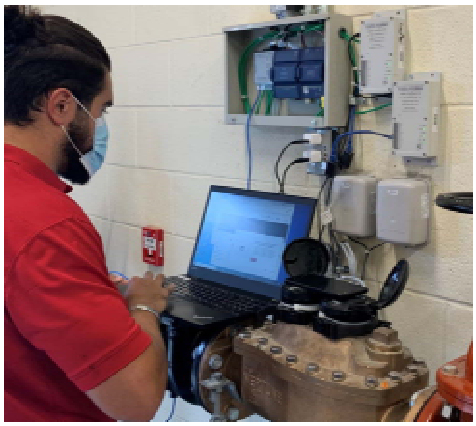
No special installation skills or hardware.
No disruption to project flow or building operation.
No 3rd party involvement or coordination.

Integrates with BMS and building monitoring systems.









Meter Compatibility

Water Optimized Version
All positive displacement, compound, multi-jet, single-jet, piston meters

Gas Optimized Version
All diaphragm, rotary, and most turbine meters

Compatible with over 95% of installed meters
Not compatible with solid state meters, ultra-sonic, Sensus Omni turbine water meters

Data Communication Protocols

- **Modbus-TCP**
- **Modbus-RTU**
- **HTTP Publish**
- **MQTT**
- **Pulse**
- **Data Logging**
- **Telnet**

Data Availability

- **Totalized volume**
- **Totalized revolutions**
- **Flow rate****
- **Minimum flow rate****
- **Maximum flow rate****
- **Temperature at Probe**

**Requires optional Ultra Hi-Res
Not all data available with all protocols

Data Resolution

Detects and totals meter revolutions for the calculation of flow volume. Resolution is proportional to meter size. The Ultra Hi-Resolution upgrade provides up to 100x the resolution of Standard HI-Resolution.

Example Resolutions

	Standard Hi-Res	Optional** Ultra Hi-res
Smaller Water Meter	2.28 oz.	0.0228 oz.
Larger Water Meter	10.66 oz.	0.1066 oz.
Smaller Gas Meter	0.11 ft^3	0.0011 ft^3

**Ultra Hi-Res is not compatible with Pulse Output

Data Accuracy

Water: > 99%
Natural Gas: > 97%

Data Rate

User programmable to any data rate, ≥1 second

Control / Remote Management

Local: via serial connection with USB cable
Remote: via telnet or onboard web server

Installation Limits

- -20C to +40C
- 10% - 95% RH non-condensing
- Not for hazardous locations

Ribbon Probe

- Indoor locations
- 18 in. ribbon cable (fixed length)

Remote Probe

- Indoor / Outdoor: water, burial, submersible safe
- 2M, 7M, and 15M CAT6 cable (extendable)
- User extendable to 200 ft

Power Consumption

300mA Max

Power Options

- 5V via USB wall adaptor
- +5VDC via Terminal Block
- Backup Battery: Rechargeable 3.7V Li-ion. (~3-6 hours backup)

Data Ownership

- Data is owned and directly controlled by the user
- Suitable for government or secure locations

Certifications

Supplier's Declaration of Conformity
47 CFR § 2.1077 Compliance

Product: VV-100
Responsible Party
Vata Verks Inc
28 School St. Arlington, MA 02476
info@vataverks.com

FCC Compliance Statement
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

VataVerks reserves the right to alter product offerings and specifications at any time without notice and is not responsible for errors that may appear in this document.