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.
Non-Invasive, Whole-Building
Water Data Acquisition VV – 100 – XX – W
Gas Data Acquisition VV – 100 – XX – G

**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

**Example Resolutions**

<table>
<thead>
<tr>
<th>Meter Type</th>
<th>Standard</th>
<th>Optional**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smaller Water Meter</td>
<td>2.28 oz.</td>
<td>0.0228 oz.</td>
</tr>
<tr>
<td>Larger Water Meter</td>
<td>10.66 oz.</td>
<td>0.1066 oz.</td>
</tr>
<tr>
<td>Smaller Gas Meter</td>
<td>0.11 ft³</td>
<td>0.0011 ft³</td>
</tr>
</tbody>
</table>

**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.

**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.