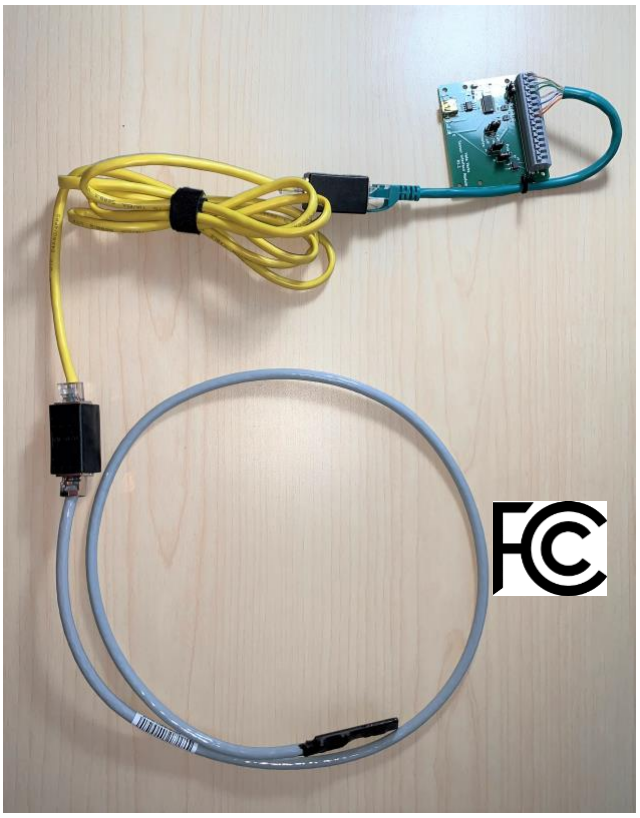
EXPRESS KIT

A real-time, hi-res, non-invasive solution to the Water and Natural Gas data acquisition problem. Orders of magnitude more granular than utility data. The one solution for all 50,000 utility territories.

Without plumbers, or cut pipes, or utility involvement. Without disruption to the building, the metering, the plumbing, the tenants, or to your schedule.



Applications

- Indoor or Outdoor Gas or Water Meters
- Whole building applications
- Projects requiring hi-res or hi-frequency data
- Suitable for disruption-restricted locations
- Suitable 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, disruption-free water and gas data
- Burial-safe, water-proof.
- Auto calibrate / Auto track
- No plumber or utility involvement
- Low profile / inconspicuous
- Compatible with all meter sizes
- Compatible with >95% of installed utility meters
- Highest data Granularity / Resolution available
- Secure Data
- Up to 200 ft of Cat6 cable distance to sensor probe
- Modbus-RTU and PULSE Output

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

Water and Natural Gas are not like other tracked variables.

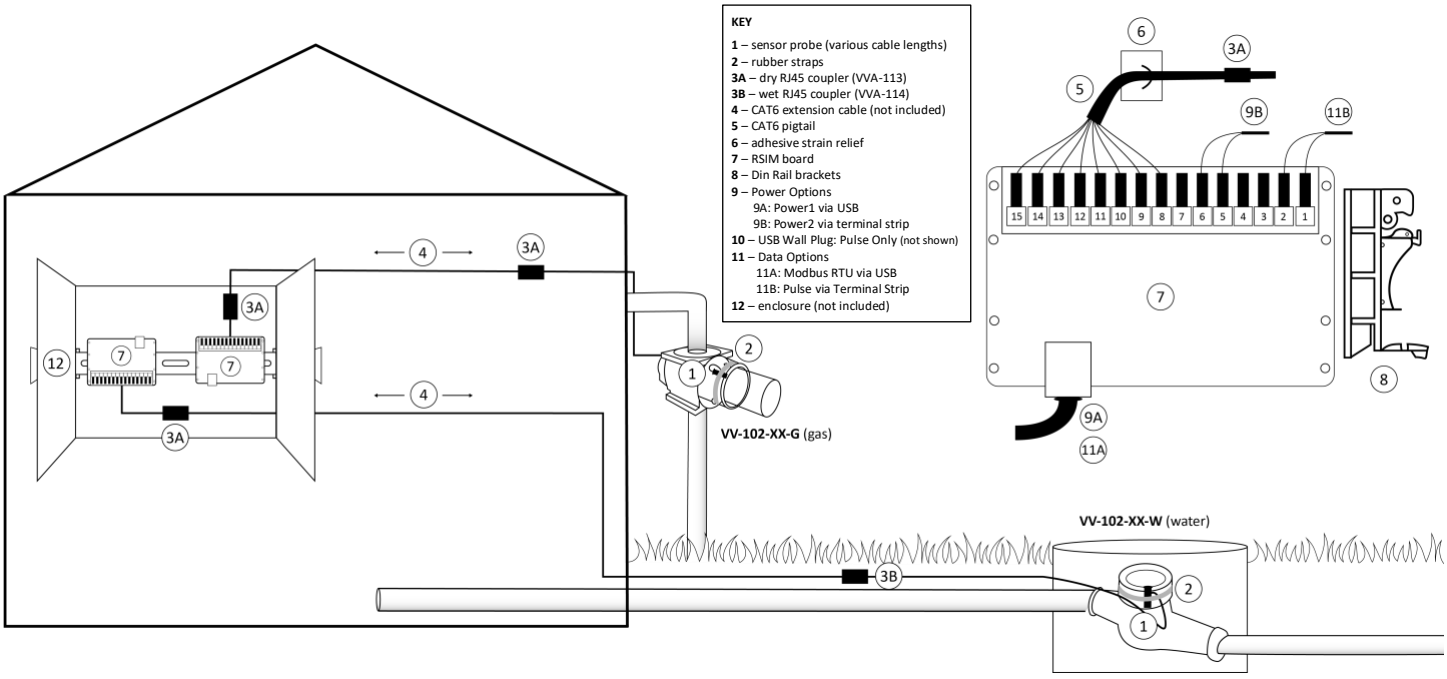
Until now, Water and Natural Gas data required plumbers and cut pipes, and disruption to building operations to install a private Water or Natural Gas meter, OR the utility installation of a second Pulse output on the existing meter.

This was disruptive to project flow, required property managers to participate in project coordination, was often expensive and in the end resulted in low-quality, “dirty” data.

Vata Verks leverages the meters that already exist in the building, eliminating hardware, and specialized installation. The sensor simply straps to the side of, and detects the internal mechanical movements of, the Water or Natural Gas meter, and from this movement, resolves high-resolution, real-time flow data.

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

Integrates with BMS and building monitoring systems.



Applications

Water Meters
All sizes positive displacement, compound, multi-jet, piston

Gas Meters
All sizes diaphragm, rotary, and most turbine

Solid state meters such as ultra-sonic, are not compatible

Data and Transmission Options

- **Modus-RTU** **via USB cable**
  Full Duplex
  Resister Terminated
- **PULSE** **via Twisted Pair**

Resolution

The sensor detects and totals meter revolutions for the calculation of flow volume. The resolution is proportional to the size of the meter.

Example Resolutions

Meters	Standard Hi-Res
Smaller Water Meter	2.28 oz.
Larger Water Meter	10.66 oz.
Smaller Gas Meter	0.11 ft^3

Data Rate

As high as 1 second. Most use 5 or 15 minutes.

Accuracy

Commonly 99% - 101%

Standard Installation Limits

- -20C to 40C
- Indoor, Outdoor
- Submersible, burial-safe probe and cable
- Probe cable lengths 3 ft, 22 ft, 49ft
- Extendable to 200 ft
- Not for hazardous locations

Data Ownership

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

Power Consumption

Less than 45mA Max

Power Options

- Primary Power via 5V USB
- Optional Power via 5VDC to terminal strip
- User can provide battery back-up in parallel via terminal strip.

Certifications

Supplier's Declaration of Conformity
47 CFR § 2.1077 Compliance

Product: VV-102
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.