Specifications & Installation Guide

NextMeter Indoor

Ultrasonic Meter with NextCentury Connect™ Wireless

The ultrasonic NextMeter Indoor (NM4-I) integrates sophisticated solid-state measuring technology with the NextCentury wireless platform, making it the first solid-state meter designed for submetering.

Next Ultrasonic Technology

The NextMeter Indoor combines advanced ultrasonic technology with the industry's leading AMR solution in a simple, user-friendly design, ensuring seamless deployment while delivering significant savings on installation costs.

NextMeter Indoor's ultrasonic technology precisely detects even the smallest flows and maintains exceptional accuracy across all flow rates. With no moving parts to degrade, this reliability and precision are sustained throughout the meter's entire lifespan.

Installation Simplified

The NextMeter Indoor integrates best-in-class metering and wireless solutions into a single device, streamlining installation and setup. Its open flow-tube design enables earlier installation during construction, eliminating the need for a spacer tube and saving your plumber a trip to the property.

NextCentury Wireless Platform

The NextCentury wireless solution sets the standard for performance and reliability, with over 4 million devices in use across the United States. Designed for simplicity, it's easy to install, effortless to maintain, and backed by the best support in the industry.

Key Benefits

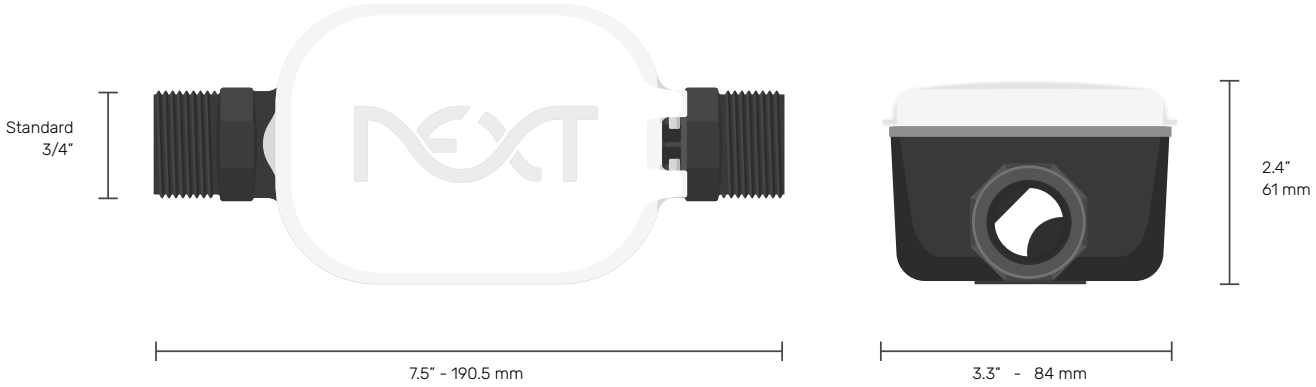
- Purpose built for Submetering
- Extra large 10-digit LCD display for easy reading
- Accuracy that doesn't fade over time
- Reduce costs with simplified installation
- Minimal head loss due to open flow-tube design
- Plug-and-play on the NextCentury wireless platform
- Real-time data and alerting
- Field replaceable battery
- NTEP and CTEP Approved
- Pulse output for remote display of meter read

Warranty

- 5-year standard warranty

Specifications

Dimensions



Applications

Meter Size	Connection	Lay Length	Max Flow
⅝" x ¾"	Standard 3/4"	7 ½"	25
¾" x ¾"	Standard 3/4"	7 ½"	30
¾" Full*	Standard 3/4"	9"	30

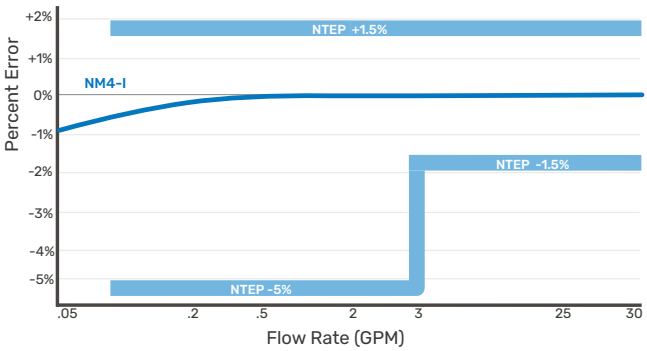
** Available with 1 ½" extension coupling*

Approvals

FCC ID: 2A8EC-NM4I | IC: 28950-NM4I
NSF/ANSI/CAN 61 & 372
NTEP/CTEP Approval 23-055
Conforms to AWWA C715-18
UL 2043 Plenum Rated

Performance

Measures flow as low as .05 gpm and up to 30 gpm
Exceeds AWWA & NTEP accuracy standards



Temperature

Safe operation with water up to 180° F | 82°C
Accuracy tested up to 150° F | 66°C

Environment

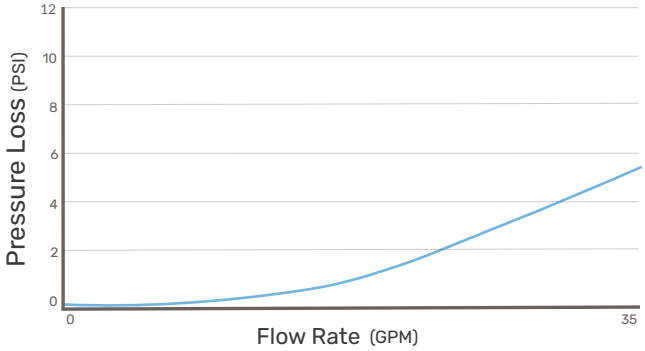
Designed for indoor installations
Ambient: 33°F to 140°F | 1°C to 60°C
Storage: 0°F to 100°F | -18°C to 38°C
Up to 90% non-condensing humidity

Outputs

Pulse output capable with cable (accessory)
Ideal for remote display requirements

Pressure

Up to 200 psi operating pressure
Minimal head loss: less than 2 psi at 15 gpm



Specifications (cont.)

Power

- Typical 10-year battery longevity
- Field-replaceable CR18505 lithium battery

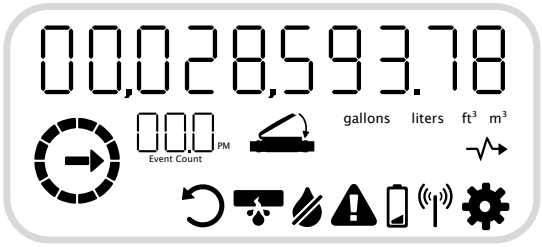
Communications

- Two-way NextCentury RF Connect™
- 902-928 MHz Unlicensed Band
- Compatible with all NextCentury Gateways and Repeaters

Data

- Meter data accessible via web and mobile app
- API access to interval data
- Hourly high-resolution meter read
- Ambient and water temperature
- Flow profiling – abnormal & reverse flow detection
- Cloud-configurable alerts and notifications

Display



The LCD displays a 10-digit total meter read, unit of measure, and current flow rate. The flow indicator wheel rotates with any measurable flow, and the arrow indicates the direction of flow. Additional status icons:


LCD display is inactive; close lid, then open again to view active display


The flow tube is dry


A burst pipe has been detected


Battery has less than 10 months remaining


Transmitting meter read data


Wired output, pulse is being sent

Shows in place of the flow rate, count increments when meter configuration updated

Warranty

Next Meters warrants the NextMeter Indoor to be free from defects in materials and workmanship for a period of five years from date of manufacture when installed in accordance with these instructions and with limitations as detailed in complete warranty.

For full warranty information, please refer to the NextMeter Indoor Warranty document.

Due to continuous product improvement and the need to comply with evolving regulations, Next Meters reserves the right to modify product specifications without prior notice.

Installation

Qualifying Installations

The indoor meter location must have sufficient finished clearance to facilitate reading, inspection, and eventual replacement of the meter or coupling gaskets.

Building plumbing engineering must comply with local building code and effectively prevent backflow through system design which may include backflow prevention check valves.

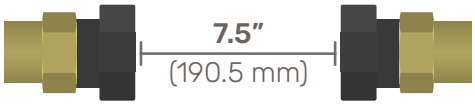
Design of plumbing system should include a shutoff valve upstream of the meter to facilitate future maintenance of the meter and other plumbing components.

New Construction

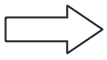
The NextMeter Indoor can be installed by a plumber as part of initial supply line work as the meter is not adversely affected by small debris that may pass through during flush out procedures.

Supply Line Coupling

Ensure that supply lines are in alignment and include at least 7.5" of straight pipe before the meter. Do not rely on tightening the connection to pull pipes together or into alignment.



The meter must be installed in the correct direction of flow. The flow direction arrows can be seen on both sides of the meter.



Connect to your water supply lines using standard 3/4" meter couplings (1" NPSM).

Use new EPDM rubber gaskets for cold water and fiber gaskets for hot water installs. Tighten to no greater than 15 ft-lb of torque.

Inline Options

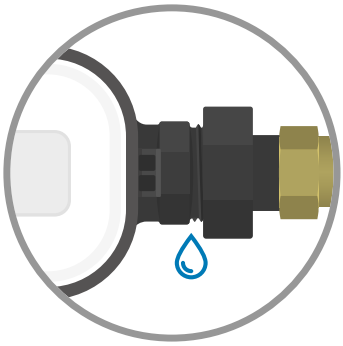
When electrical grounding of the water supply line is required, an approved bonding jumper should be installed.

The NextMeter Indoor can be installed horizontally or vertically.

Orient the register display facing the direction that will be most convenient for reading.

Pressurizing Line

The NextMeter Indoor will begin measuring flow once air has evacuated and water has completely filled the line.



After pressurizing, carefully inspect the coupling connections for moisture to ensure a water-tight connection has been made.

Installation (cont.)

Programming & Configuration

Programming is the process of associating the meter's serial number with the unit number and water utility type where it is installed.

This process is quick and simple using the web or mobile app and can be completed as a process before installation, or incrementally as each meter is installed.

The NextCentury web app (app.nextcenturymeters.com) offers a rapid programming interface which is convenient for pre-programming devices before installation. The NCSS mobile app is ideal for on-site programming and verification.

App Store
iOS App

Google Play
Android App

Property Setup

Using the web or mobile app, recreate your property's layout by adding buildings or floors and unit numbers.

Add the serial number of the Gateway and Repeaters being installed.

Scan the Meter's Barcode

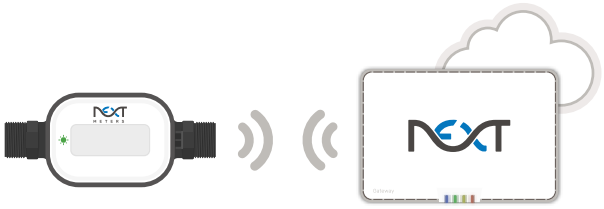
Using the mobile app's built-in barcode scanner or an accessory barcode scanner, input the serial number of the meter.

Enter any location or description information that will be useful for tracking and maintenance.

Wireless Communication

Open the cover of the NextMeter to initiate a two-way wireless check-in.

The meter's LED indicator will blink green two times verifying its connection with the Gateway.



If green blinks are not seen, ensure the Gateway and Repeaters are powered and online.

The meter cover can be closed and opened again to retry. If green blinks are not seen after retrying, an additional Repeater likely needs to be installed.

Leak Monitoring Subscription

Enable the Leak Monitoring Service subscription for optional immediate alerting of sustained high-flow (burst pipe).

This service includes a Property Portal giving on-site staff access to alert and equipment health management.

Once configured, alerts will automatically be sent via phone, text, and/or email to designated alert contacts. Alert notifications are repeated until one of the contacts confirms the alert has been received.

Testing & Quality Assurance

Performance in Application

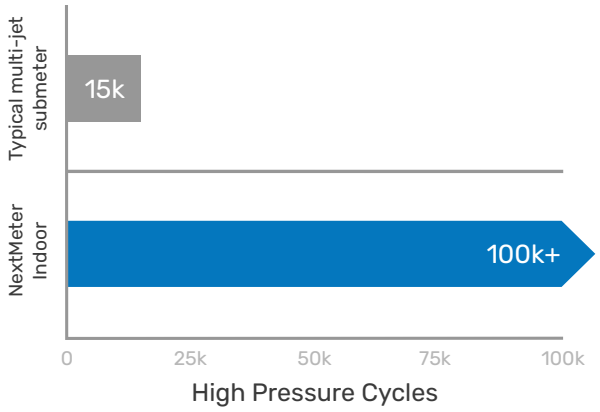
Multi-family and commercial water distribution systems must be designed with careful consideration to prevent pressure spikes that exceed maximum pressure requirements. All plumbing components, fixtures, and appliances typically are required to withstand at 2x the nominal static water pressure.

The NextMeter Indoor is engineered to perform far beyond these basic requirements. Its rated maximum pressure far exceeds standard water supply specifications. Should a water system become over-pressured, the engineered and tested burst pressure is several times this operating maximum, ensuring that the NextMeter Indoor is unlikely to be a point of failure even in a plumbing system operating out of specification.

Pressure Endurance Testing

The NextMeter Indoor's advanced engineering and pressure endurance extends throughout its lifetime operation. This performance is verified using accelerated-life testing, in which the NextMeter Indoor is pressurized to 300 psi for 100,000 cycles (see AWWA C715).

A typical single or multi-jet submeter will begin to leak or completely burst within an average of 15,000 pressure cycles. The NextMeter Indoor can endure over 100,000 pressure cycles, ensuring its operating integrity over its full service life.



Design & Material Specifications

The NextMeter Indoor boasts a unibody design that is incredibly strong and resilient for long term maintenance-free operation. This contiguous flow-body design eliminates internal gaskets which are often a point of early failure in conventional meter designs.

The flow body is constructed of PPS glass-filled (advanced glass-reinforced polymer) and offers increased durability, resistance to deterioration, and protection against water contamination.

UL 2043 Conformity

The NextMeter Indoor has been tested to perform in accordance with UL 2043, "Fire test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air Handling Spaces".

Conformity to this UL code allows the NextMeter Indoor to be installed in air handling plenum spaces when applicable to your building design.

NSF Testing

The NSF testing is conducted to evaluate the quality and safety of the NextMeter Indoor in compliance with NSF standards. The test ensures that the meter is free from harmful contaminants and can operate efficiently without posing any health risks.

Contact Information

For additional information or assistance, please visit our Support Center or contact our Product Support Team:

support.nextmeters.com

(844) 538-8203

support@nextmeters.com