NXU RESIDENTIAL SMART GAS METER

Introducing our multirange meter that helps stop incidents before they start.

The NXU Residential Smart Gas Meter is a smart ultrasonic meter connected via cellular to head-end software, providing end-to-end measurement data to a larger data management system. It features an integrated, remote shutoff valve and a pressure transducer for next-level safety, detecting and stopping gas leaks to help protect people and property.

This intelligent, ultrasonic solution is also easy to install and test, allowing gas utilities to decrease maintenance and increase operational efficiency.

WHY NXU RESIDENTIAL SMART GAS METER?

PRESSURE TRANSDUCER

The NXU Residential Smart Gas Meter is the only residential gas meter with pressure sensing capabilities coupled with an integrated controller. The pressure transducer recognizes pressure changes and triggers alerts for inconsistent readings, helping utilities stay ahead of leaks and stop potential residential explosions.

ULTRASONIC TECHNOLOGY

Measure flow rates and infer the density of gas composition and dust and liquids in the measurement path. Also recognize (and report) changes in gas composition and flow without any turning parts. Not only does ultrasonic technology maintain accurate data capture and reads throughout the meter's lifetime, but it also provides long-term operational reliability, meaning utilities don't have to worry about premature replacements or failures.

INTEGRATED, REMOTE GAS SHUTOFF VALVE

This shutoff valve has a high-pressure precision seal and is the only residential gas meter that exceeds ASME B16.33 section 4.2 guidelines for gas tightness. It helps utilities identify and stop leaks without visiting the meter if abnormal flow, temperature or pressure is detected.

DUAL-FORM FACTOR METER

250 425

One NXU Residential Smart Gas Meter can read both 250 and 425 cubic feet of gas per hour. This eliminates the future need for a meter replacement if consumption increases, which helps save utilities and their customers time and money via lower warehousing, transportation, carrying and installation costs.

CELLULAR CONNECTIVITY

Automated Meter Infrastructure leveraging widespread cellular networks, and eUICC to achieve worry free connectivity.

ANALYTICS

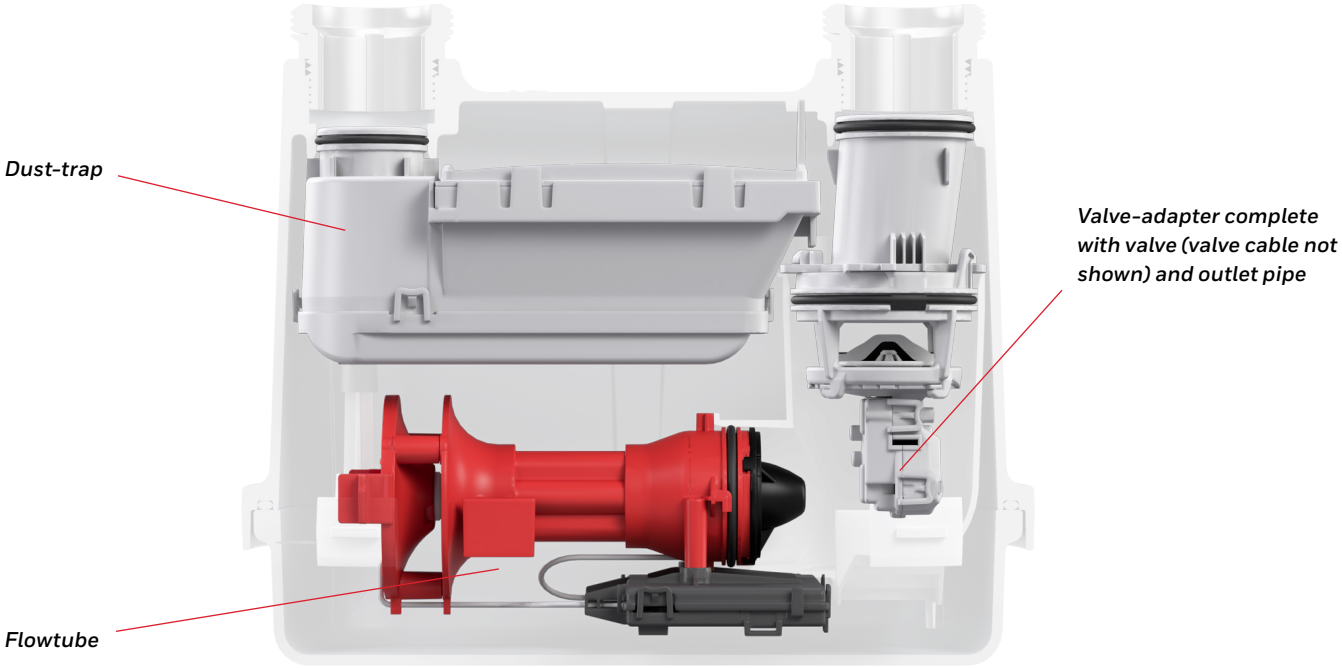
Accurate data that's captured in real time provides visibility into operational inefficiencies and actionable insights to better optimize metering and overall utility performance.

Honeywell

ADVANCED METER DIAGNOSTIC FEATURES AND BENEFITS

- **Detection of dust or liquids in the measurement path** via changes in speed of sound and signal-to-noise ratio helps gas utilities recognize and monitor changes in gas composition and turn off the flow to prevent potential danger if these variables become too great
- **Accurate speed of sound measurement capabilities** assess the density of gas composition, which is then used to make sure utility customers receive gas at the right flow rate and are billed accurately
- **Detection if measurement is not fully correct or inaccurate** will alert utilities so they can take reparative action in real time, keeping residential customers safe and maintaining accurate billing
- **Detection of aging effects by signal processing (e.g., gain adjustment)** keeps utilities apprised of when infrastructure may need to be replaced or adjusted
- **Diagnostic upgrades via over-the-air updates** keep operational maintenance costs low and meter performance high

NXU RESIDENTIAL SMART GAS METER INTERNAL PARTS



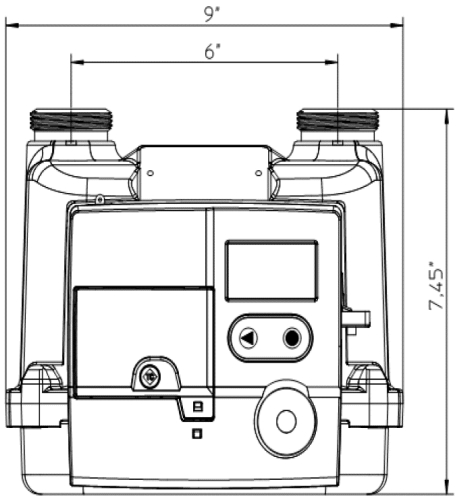
NXU RESIDENTIAL SMART GAS METER FEATURES

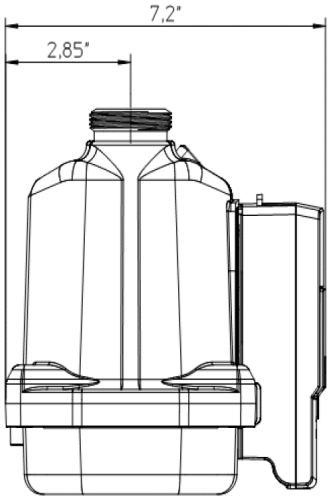
KEY PRODUCT FEATURE	CUSTOMER BENEFIT
ANSI B109 Test Results	✓ RELIABILITY
20-Year Battery Life	✓ RELIABILITY
C1D1 IS UL or Equivalent	✓ RELIABILITY
Measurement Accuracy	✓ REVENUE
Safety Shutoff Valve B16.33	✓ SAFETY
Built-In Pressure Sensor	✓ LEAK DETECTION
CAT M with NB-IoT Fallback	✓ COMMUNICATION
eUICC	✓ REDUNDANCY
eDRX	✓ REACHABILITY

NXU GAS METER SPECIFICATIONS

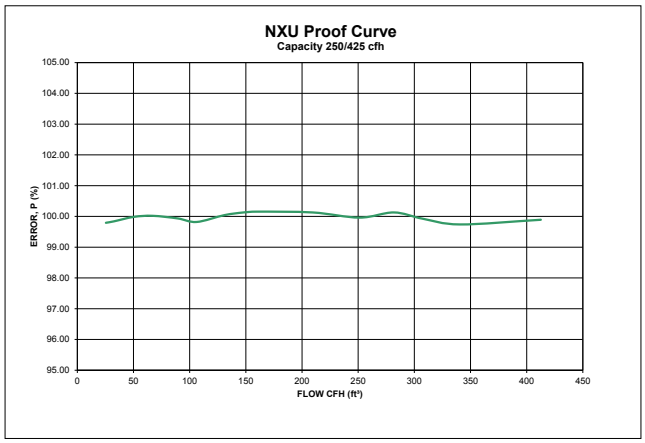
SPECIFICATION	VALUE
Flow rate	425 CFH at 0.5 in w.c.
Measurement principle	Ultrasonic Measurement (time of flight)
Safety	Class I, Division 1, Group D, Temp Class T1
Meter type	Temperature compensated (TC)
Meter Maximum Allowable Operating Pressure (MAOP)	10 PSIG (690 mbar)
LCD displayed units	CCF (100 x cubic foot)
LCD resolution	000000.001 CCF
Valve	Maximum 0.035 CFH (1 L/H) leakage rate at max 2PSIG diff pressure
Case	Die-cast aluminum case
Weight	6 lbs.
Gas type	Natural gas EN437- Type H,E,L Reference gases G20, G21, G23, G25, G26, G2
Connection sizes	10 LT, 20 LT, 30 LT, 1" PITTS, 1" Sprague
Operating temperature ratings	Measurement -30° F (-34° C) to +140° F (60° C) Valve -13° F (-25° C) to +131° F (55° C) Index -40° F (-40° C) to +158° F (70° C)
Storage temperature	40° F (-40° C) to +158° F (70° C)
Battery information	2 Lithium Thionyl Chloride “D” cell batteries; one battery is replaceable
Battery life	20 years for both metrology and index communication (under recommended operating conditions) without battery change
Standards	Designed in compliance with ANSI B109.6
Regulatory	This device complies with Part 15 of the FCC rules. FCC ID: 2AAGMGM02SA
Component materials	Single-coat polyester
Cellular Bands supported	Bands 2, 4, 12, and 13

DIMENSIONS

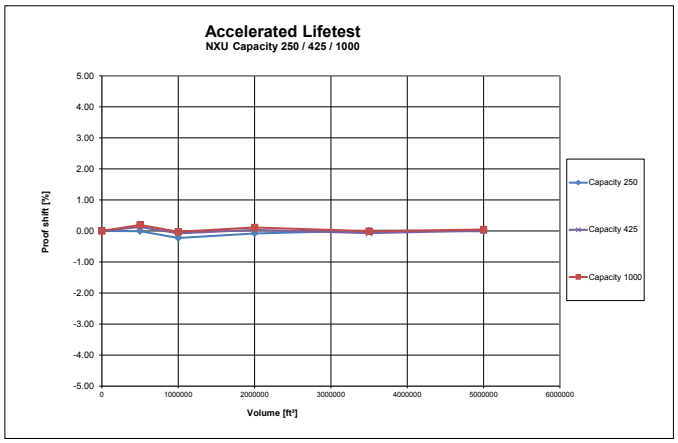




PROOF CURVE



ACCELERATED LIFETEST



METER CAPACITIES* (0.6 SPECIFIC GRAVITY GAS)

LINE PRESSURE PSIG / (mbar)		DIFFERENTIAL PRESSURE INCHES W.C. / (mbar)		CAPACITY SCFH / (m³/h)	
0.25	(17)	0.5	(1.2)	425	(7.1)
1	(69)	0.5	(1.2)	441	(12.5)
2	(138)	0.5	(1.2)	463	(13.1)
5	(345)	0.5	(1.2)	525	(14.9)
10	(690)	0.5	(1.2)	623	(17.6)
0.25	(17)	2	(5)	850	(24)
1	(69)	2	(5)	882	(25)
2	(138)	2	(5)	925	(26.2)
5	(345)	2	(5)	1049	(29.7)
10	(690)	2	(5)	1246	(35.2)

*Capacities determined at elevated pressures outside the typical operating conditions of 0.25 PSIG line pressure and 0.5 inches w.c. differential pressure. The connection sizes are specified by ANSI B109.6.

For more information
https://automation.honeywell.com/us/en/solutions/smart-energy/products/nxu

Honeywell Smart Energy
2101 CityWest Blvd.
Houston, TX 77042

All rights reserved. The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with the applicable referenced standards.

© 2025 Honeywell International Inc.

THE FUTURE IS WHAT WE MAKE IT

Honeywell