

MEASUREMENT IQ FOR GAS

Elevate your measurement insight with real-time visibility for high pressure equipment

Honeywell Measurement IQ for Gas is the connected solution for a more efficient, reliable metering operation. It helps natural gas businesses eliminate the measurement errors that can quickly erode profits.

Users gain real-time insight into their metering operation, with an at-a-glance diagnostics dashboard and intelligent alarms to rapidly identify and resolve meter issues. Reducing uncertainty, it cuts the costs of lost and unaccounted for gas, and enables condition based monitoring for more efficient, effective meter maintenance.

REAL TIME VISIBILITY

Measurement IQ provides real-time, round-the-clock visibility of the performance of all your fiscal measurement (Ultrasonic meters, Gas Chromatographs). It supports not only Honeywell's ultrasonic meters, but also a range of the most widely used third-party devices.

Providing round-the-clock monitoring of meter health, it offers condition based monitoring tests according to the latest ISO 17089 standard. The software also includes real time uncertainty calculations. These are performed at the point of actual flow measurement making use of uncertainty contributors like calibration uncertainty, installation effects, meter status.

Measurement IQ eliminates the need of unnecessary recalibrations common with periodic or risk-based maintenance strategies. It automatically detects indicators of performance deterioration or forthcoming equipment failure to prompt servicing. Users can then apply maintenance only when it's required and reduce site engineering visits. Historic diagnostics can be used as a basis for extending calibration intervals specified by regulatory authorities.

Capturing all your meter information, the software provides comprehensive data tracking and supports third-party audits and metrological approvals. Users can also share data with others across the enterprise.

CONNECT AND SCALE

Users can choose to have it hosted in the Cloud or install it locally on site to gain a single view of metering across the organisation. With a simple edge device at each metering station Measurement IQ securely connects users to their equipment across the enterprise and across the globe.

Hosted in the Cloud, Measurement IQ includes best-in-class industrial cyber security for rapid, secure connection to all gas metering stations. Cloud analytics and data processing detect any significant changes in the flow meter, process or environment and turn it into actionable intelligence. With increased insights, users can build a better, more efficient operation.



TECHNICAL DETAILS

Diagnostics checks

- Velocity of Sound Check against AGA10*
- Path Performance*
- Velocity of Sound Ratio Test (VoS Ratio's)*
- Flow Profile Factor test
- Asymmetry test
- Swirl angle test
- Velocity of Gas Path Ratio Test (VoG ratio test)*
- Automatic Gain Control (AGC) Level and Limit Tests*
- AGC Level test (Elevated AGC Level)
- Path AGC Level Ratio Comparison
- SNR (Signal to noise ratio) test*
- AGC level A vs. B Mismatch
- Peak Skip / Transit Time Tests
- Turbulence Test

* According to ISO17089

Calculations

AGA8, AGA9 and AGA10, calculations.

Supported Ultrasonic gas meters

- Honeywell Q.Sonic^{max}
- Honeywell Q.Sonic^{plus}
- Honeywell TwinSonic^{plus}
- Honeywell Q.Sonic-3C, -4C and -5C
- Honeywell Q.Sonic-3S and -5S
- Daniel; SeniorSonic (4 path)
- Sick; Flowsic600 (4 path)
- Sick; Flowsic600-XT (4 and 8 path)

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Cloud users also benefit from automatic updates. With a range of service levels available, including Total Care, plants can even choose to outsource their entire meter monitoring operation to Honeywell through on-site server or the Cloud

FEATURES AND BENEFITS

- Real-time, 24/7 condition-based monitoring
- Support Gas Chromatographs from all major manufactures
- Real time uncertainty calculation
- Increase measurement certainty
- Supports meters from all major manufacturers
- Detect and diagnose meter or process issues quicker to prevent downtime
- Monitor metering assets across the enterprise in real time
- Reduce engineer site visits
- View and share data before engineers get to equipment
- Increase certainty to extend calibration periods
- Tailored alerts and alarms for Honeywell Experion mobile app users
- Meter audit trails for third parties and metrology approvals
- Import historical logged data from legacy systems to create reference files
- Cost certainty and peace of mind with Total Care Field Services
- On-site or in the Cloud

For more information

To learn more about Honeywell Measurement IQ for Gas, visit www.honeywellprocess.com or contact your Honeywell account manager.

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Additional trademark information can go here.
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TECHNICAL DETAILS

(Continued)

Interfaces

Ethernet, Serial RS485/232

Protocols on-prem:

- Modbus TCP/IP client and server
- Modbus RTU master and slave
- Modbus ASCII master and slave
- OPC DA server

Protocols Cloud solution

- Modbus TCP/IP client
- Modbus RTU master

System requirements (on premises)

- Microsoft Windows 10 Professional or server 2016 (64 bit)
- Processor: i5 2.7 GHz
- Memory: 4GB RAM
- HD 320 GB (depending on total streams)

Edge device (for cloud)

- part no. SC-UCMX01
- Compact dimensions (L x W x H) 190 x 99 x 141mm including mounting plate
- Operating Temperature -40 to 75°C (-40 to 85°C storage)
- Humidity 5% to 95% RH (non-condensing)
- Processor Dual Core ARM® Cortex™-A9 Core (32 bit) 667 MHz
- Dynamic memory (RAM) 128 Megabytes
- Program memory (Flash) 32 Megabytes
- Nonvolatile memory 4Mbits
- Nonvolatile memory data life 20+ years (no battery required)
- Real-time clock resolution 1 ms
- Execution cycle time >= 50 ms

Qualified VPN gateway (for cloud)

- Cisco 819G
- Digi TransPort WR31

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell