MEASUREMENT IQ
FOR GAS

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

> Honeywell Measurement IQ for Gas is the autonomous 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 meter, Orifice plates, Coriolis meters and Gas Chromatographs). It supports a wide range of metering principles including third-party devices.

Providing round-the-clock monitoring of meter health, it offers condition based monitoring tests according to the latest standards. The software also includes dynamic 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

Make it easy to manage all your metering equipment optimally with MIQ Optimize. With a single enterprise-wide view for gas operators it delivers clear and actionable recommendations that help maximize the value obtained from meters and gas chromatographs. Honeywell's integrated approach that is built on multiple decades of metering expertise, helps improves reliability, identifies critical trends before they affect operations, and reduces recalibration cost.

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
- Response factors against initial calibration values**
- Response factors against previous calibration values**

* According to ISO17089

** GC diagnostic tests

Calculations
AGA8 1994, AGA10 1994, AGA8 2017, ISO6976 1995, ISO6976 2016.

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FEATURES AND BENEFITS

- Real-time, 24/7 condition-based monitoring
- Support Gas Chromatographs from all major manufactures
- Dynamic uncertainty calculation (certified by DNV)
- 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
- 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
- Multi-language support
- USM, orifice, coriolis and GC recommendations
- Real time flow computer calculation verifications and tamper detection
- Redundancy
- Enterprise dashboard (MIQ Optimize)
- Easy connectivity with Modbus Editor

TECHNICAL DETAILS
(Continued)

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)
- Krohne; ALTOSONIC V12
- RMG; GT400 and USZ 08
- Weise; CL-1-4 and CL-1-4S

Supported Gas Chromatographs
- Honeywell EnCal 3000 C6+ and C9+
- Rosemount 570 C6+ and C9+
- ABB NGC8206 C6+ and C9+

Supported Coriolis meters:
- Krohne MFC
- Emerson Micro Motion
- Endress & Hauser Promass 300

Interfaces
- Ethernet, Serial RS485/232

Protocols:
- Modbus TCP/IP client and server
- Modbus RTU server
- Transport Layer Security (TLS) 1.2

System requirements (on premises)
- Microsoft Windows 10 Enterprise 2019 LTSC 64-bit or Microsoft Windows 10 Enterprise 2016 LTSB 64-bit
- Processor:
  < 10 devices/assets: i5 10th gen 2.00 GHz or higher
  > = 10 devices/assets and < 20 devices/assets: i7 10th gen 2.00 GHz or higher
- Memory:
  < 10 devices/assets: 16 GB RAM
  > = 10 devices/assets and < 20 devices/assets: 32 GB RAM
- Hard disk:
  < 10 devices/assets: 500 GB SSD
  > = 10 devices/assets and < 20 devices/assets: 1000 GB SSD

For more information

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

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