



Honeywell Experion[®] PKS
Integrated Flow Measurement Solutions

A New Approach to Metering

Oil and gas producers and processors around the world require reliable, accurate measurement to maximize performance, profitability and most importantly, safety of their applications. Government authorities, meanwhile, need certainty because their revenue depends on it. However, many oil and gas producers, refiners and chemical processors rely on disparate, bespoke systems for these crucial measurements which are often obsolete and difficult to support. Time for a more standard and integrated approach to metering that offers the latest industry technology—MeterSuite.

The Metering Function is Changing

A variety of industry trends are driving the call for a standard and fully integrated metering solution.

MeterSuite

With our industrial knowledge and experience in the Oil and Gas industry, we understand that a small change in measurement accuracy can have a major impact on profitability. That's why MeterSuite is designed to help you accurately measure and understand your oil and gas flows using standard applications coupled with advanced diagnostics, to control all key metering parameters with predictive metering systems that detect potential system failures before they happen, and sustain your metering equipment throughout its lifecycle with expert services.

Ageing Equipment

Many of the original metering computer systems in the oil and gas industry are reaching their end of life. This obsolescence is due to the practice of using bespoke and dedicated standalone flow computer systems. This was the standard many years ago but now companies are looking to replace their aging systems with standard future proofed metering technology that meets the needs of the 21st Century. MeterSuite surpasses these requirements and offers standardization and flexibility at a scalable cost.

Increased Accountability

Demands on operators for transparency and traceability from their metering systems are increasing. At the same time, greater flexibility and standardisation is needed to meet changing operational needs.

In this context, standalone bespoke systems are too rigid, usually requiring the third-party vendor to make changes: a process that is time-consuming and costly for the operator.

MeterSuite: Meeting the Needs of Today's Operation

MeterSuite answers the challenges of the modern operating environment. Addressing the weaknesses of bespoke systems, it's an off-the-shelf, efficient, future-proofed, flexible metering solution:

- Providing accurate and cost effective flow measurement.
- Operating within the proven Experion platform for a longer product lifecycle which fully future proofs your investment.
- Built as an integrated and open platform system for greater visibility and flexibility to meet today's rapidly changing requirements.

With all the benefits of a centralized solution, such as commonality and scalability, MeterSuite offers improved monitoring, management and reporting—supplying accurate secure data to the whole operation. Tightly integrating the metering function within the control system architecture, it puts control back in the hands of the operator. Metering system data is a rich source of information that is rarely interrogated correctly. MeterSuite is fully integrated into the DCS which allows the operator access to the whole metering system data rather than a predetermined segment and so helps him to make a more informed decision every time.



Measurable Benefits

MeterSuite offers a new approach to metering on a common, supportable, proven platform with no need for customized hardware and engineering.



The Power of the Experion Platform

All the standard and advanced Experion features are available to MeterSuite users to manage the metering application:

- Flexible reporting
- A single point of configuration
- Advanced trending
- Alarm management
- ASM compliant HMI
- Use of latest field device technology
- Uses standard Industry protocols
- Use of standard templates
- Complete historian solution
- No further software interfacing required.

High Capacity Multi-stream Measurement

MeterSuite uses the standard C200 and C300 controller platform as the “flow computer.”

This is the fiscal point. This provides a very accurate secure platform that is industry leading.

The Experion controller platform allows for a large number of metering streams to be configured in each controller while the common software interface facilitates simple, fast configuration.

Fewer Systems to Maintain and Less Training

With metering functions inside the control system, there is no external system or custom to observe the operation more closely, while the single platform architecture means all metering data is readily available—crucial for efficient diagnostics.

A Choice of I/O for Metering

The C200 and C300 controllers support a wide variety of I/O, including analog, remote I/O, ISO6551 support for pulse input, FOUNDATION* Fieldbus and HART and Universal I/O. It lets you follow the chosen approach for your operation.

Adapting as the Business Changes

ISO, API and AGA calculations are loaded into the C200 and C300 controller and allow an online upgradeable migration path, as with any other Experion application. The MeterSuite metering system easily keeps up with changing business and regulatory requirements, with minimal impact on your process.

Easy Upgrade of Your Existing Experion for These Capabilities

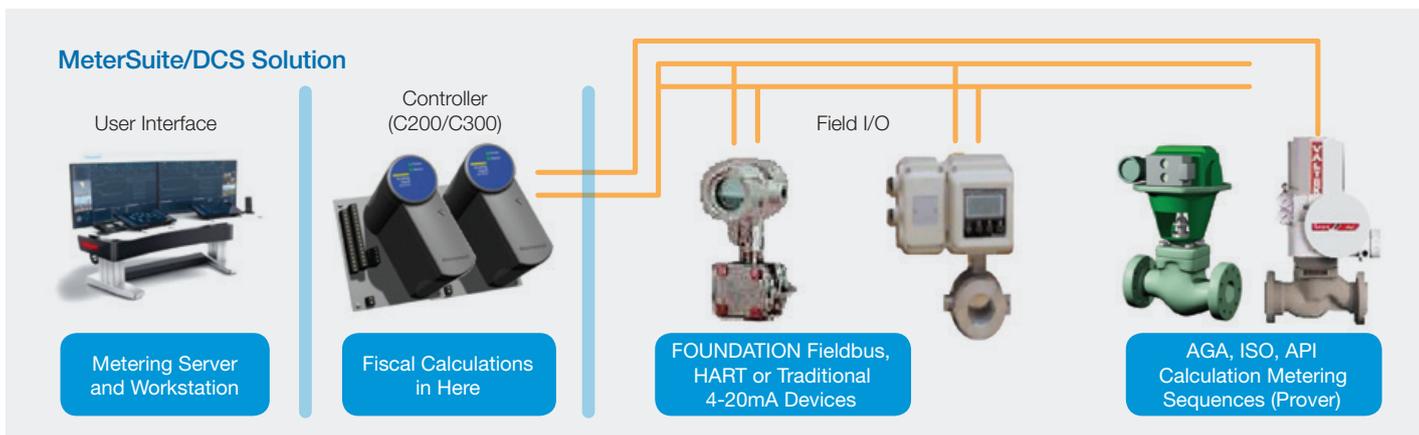
Existing Experion infrastructure can be enhanced for MeterSuite metering capabilities by enabling these options in the license. The standard metering blocks can be implemented in your C200 and C300 controller with no down time of your process. The other option is also a new C300/C200 controller can be added to the existing Infrastructure for large systems.

MeterSuite: Efficient, Powerful and Flexible

- An off-the-shelf, standard solution
- Cost effective—upfront and over the lifecycle
- Reliable: A proven metering solution based on a proven DCS platform—Experion
- Open: As flexible as your business
- Scalable to grow with you
- A single system supplier
- Advanced control for batching and proving
- Simple integration to higher level business systems such as accounting or day-total gas delivery targeting
- Online software upgrades
- Extended life cycle support and longevity
- Local support for your system
- Implemented by metering experts.

“Technology and innovation are increasingly important to the success of the UK Continental Shelf and we encourage the use of solutions like Honeywell’s fiscal metering applications. Experion PKS provides a rich feature-set for trending, reporting, archiving and auditability that is invaluable for everyday process applications and may prove to be equally beneficial as part of a fully integrated fiscal metering solution.”

— Douglas Griffin, Head of Measurement, Upstream, Dept. of Trade & Industry–UK



A Fully Supported Solution for All Your Metering Needs

MeterSuite offers all the components you need and technology you can count on. Users can start small and scale up, adding flow metering for new streams without extra hardware. They also benefit from Honeywell's extensive implementation expertise, bringing decades of experience in automation and the oil and gas industry.

Configuration and Features

MeterSuite can be configured to meet the needs of small or large systems. Choose the components and options needed for a tailored solution:

- C200 or C300 controllers
- Flexible I/O choices—direct connect or remote options available, analog, HART, FOUNDATION Fieldbus, advanced pulse and Universal I/O options
- Gas/liquid metering calculation libraries implemented as configurable blocks in the C200:
 - AGA Library, covering AGA 3, 7, 8, 9 and 10
 - ISO5167 both methods, ISO6976
 - API11.1, API11.2.4
 - Costald
 - Fiscal totalisation.
- Custom algorithm blocks for specialist applications can be quickly compiled
- Fast execution environment in C200 and C300 controllers
- MeterSuite surpasses the required level of precision for Custody transfer metering—0.001%—providing repeatability, reliability and security as expected by regulatory authorities DECC, MID, OIML and AER
- Tracking/audit trail for configuration changes to support API MPMS Chapter 21.1 and 21.2-based solutions
- An Experion MeterSuite Solution may consist of new Experion hardware or may utilize existing Experion hardware
- The MeterSuite solution can be supported by the local affiliate as it is based on the standard Experion Platform
- Honeywell have expert engineering services for design, implementation and commissioning of metering solutions.

MeterSuite Solutions

- Fiscal flow measurement
- Custody transfer
- Pipeline measurement
- Batch loading
- Meter proving applications
- Single or multi-stream measurement
- Flow control.

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For More Information

To learn more about Honeywell's MeterSuite Solutions, visit www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

Honeywell

1250 West Sam Houston Parkway South
Houston, TX 77042

1280 Kemper Meadow Drive
Cincinnati, OH 45240
Phone: +1 (513) 272-1111

www.honeywellprocess.com

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