



Custody Transfer Metering Systems

Metering Solutions that Go Beyond Performance

www.yokogawa.com

vigilantplant.[®]
The clear path to operational excellence

YOKOGAWA 



Metering Solutions that Go Beyond Performance

For over 15 years, Yokogawa has been providing proven Custody Transfer Metering Systems to customers from diverse industries across the globe such as oil & gas, onshore processing, offshore processing, cross country pipeline and many others.

Drawing on Yokogawa's unparalleled engineering excellence and commitment for over 95 years, its metering solutions are intricately customized to meet each customer's distinctive needs. No two solutions are the same. Its whole life cycle – entirely anchored by Yokogawa highly rated design and engineering team – covers site survey, front-end engineering design, detailed engineering design, fabrication and integration, testing, start-up commissioning, site services and 24/7 worldwide after-sales support.

A world leader in industrial automation and control, test and measurement, Yokogawa is firmly committed to bringing you the best-in-class Custody Transfer Metering and Allocation Metering Systems. Through innovative metering solutions that go beyond performance, we firmly set you on a clear path to operational excellence, and most of all business success.

About Yokogawa

Yokogawa's global network of 25 manufacturing facilities and 80 companies spans 54 countries. Since its founding in 1915, the US\$3 billion company has been engaged in cutting-edge research and innovation, securing more than 7,200 patents and registrations, including the world's first digital sensors for flow and pressure measurement. Industrial automation and control, test and measurement, information systems and industry support are the core businesses of Yokogawa. For more information about Yokogawa, visit www.yokogawa.com



Custody Transfer Metering Systems

Reliability. Accuracy. Cost-Effectiveness.

Backed by decades of engineering experiences and the state-of-the-art measurement capabilities, Yokogawa assures you metering systems that are consistently reliable, highly accurate and cost-effective.

Turnkey Solutions that Deliver Performance

- One-stop metering hub for total metering solutions and services
- Full range of flow measurement solutions that employ cutting-edge technology
- Advanced in-house capabilities including design, engineering, fabrication and testing
- Comprehensive life cycle management
- Small to mega-scale multi-EPC projects, complete with dedicated project management

Unmatched Advantages (USPs)

- Proven experience with impressive track record in Custody Transfer Metering Systems
- In-depth knowledge of Custody Transfer Codes and Regulations (International and local)
- Engineering designs undertaken by Yokogawa highly rated core design team while its quality control team monitors all manufacturing activities
- Excellent in-house capability for piping and structural design
- Global standard third-party certification on all projects deliverables
- Yokogawa 24-hour Emergency Response Centre that provides worldwide after-sales support

Yokogawa Commitments

- Turnkey solutions customized to deliver high-accuracy metering solutions
- Best-in-class engineering designs, products and manufacturing capabilities
- Highly qualified experts to design, manufacture and integrate metering systems, including engineers, system specialists, project manager and site personnel
- On-time delivery, operational excellence and cost effectiveness
- Full compliance with project and customer requirements



Innovative Metering Solutions

Powered by Yokogawa Engineering Ingenuity

Turnkey Metering Solutions

- Global experience combined with expert know-how
- Solutions for upgrading, new installation and modification
- Engineering consultancy

Products & Applications

- Complete state-of-the-art product range such as flow meters, transmitters, analyzer and flow computer
- In-depth knowledge on and use of third-party equipment
- Integration that delivers reliability, high accuracy, and system integrity

Manufacturing & Production

- Full compliance with international governing standards for design/engineering of metering and relevant local metrological regulations
- In-house design, engineering, testing capabilities including mechanical fabrication and integration of all third-party equipment
- Project management by highly qualified Yokogawa experts

Project & Service Support

- Yokogawa's global network of local offices and services headquarters
- Seamless 24/7 customer support that includes logistics & spares management support, in-house and field repairs
- Customized training and maintenance packages

Metering Solutions
consultancy

Life cycle services:
training / maintenance
24/7 worldwide support

Start-up commissioning

Site installation
headquarters

Testing and F.A.T.

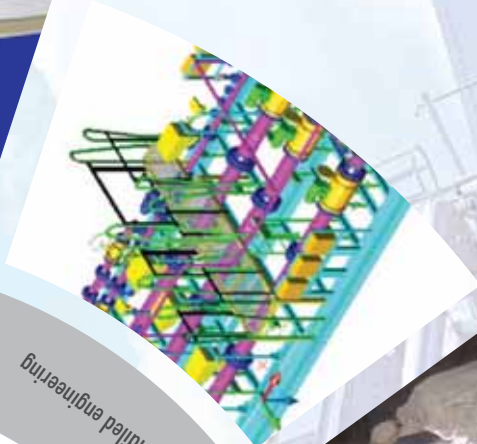
Fabrication and Assembly

Detailed engineering

Technical / commercial
proposal

Front-end engineering
design

Site survey



Advanced Metering Products & Applications

Assured Measurement.



Dual/Single Chamber Orifice Meters

Dual Chamber and Single Chamber Orifice Assemblies, in full compliance with the latest international standards.



Coriolis Mass Flow Meters

High precision measurement and robust sensor design provides guaranteed performance and reliability under the toughest process condition.



Multi-variable Transmitter

Single-crystal silicon resonant sensor that is suitable to measure liquid, gas, or steam mass flow.



Gas Chromatograph

Advanced GC solution that addresses contemporary needs for ever-tighter BTU measurement including H₂S and C₉+



Ultrasonic Meters

State-of-the-art technology, highly precise Ultrasonic Meters for liquid & gas application, complying with the latest international standards.



Flow Computer

Modular, high performance, latest design concept flow computer for liquid & gas application, complying with the latest international standards.



STARDOM and SCADA with HMI

SCADA with web-based HMI is a user friendly, powerful, modular and reliable complete solution for modern day requirement of supervision and acquisition of data in the process control.



Beyond Metering Solutions

Experience Yokogawa's Legendary Engineering Excellence

Yokogawa's legendary engineering excellence lies in its relentless pursuit of cutting-edge research and innovation. Its global leadership in flow and pressure measurement, industrial automation and control, test and measurement, and information systems is propelling the worldwide recognition of its Custody Transfer Metering and Allocation Metering Systems. Experience Yokogawa. Step on and plug onto its vast network of industry expertise and support.

Proven Track Records

- Approved by SIRIM, Malaysia and MIGAS, Indonesia as Custody Transfer Metering System provider
- Major Custody Transfer Metering System customers:
 - PTT, Thailand
 - Petronas, Malaysia
 - VSP, Vietnam
 - Pertamina, Indonesia
 - British Gas, Tunisia
 - PetroCanada, Syria
 - Petrofac, Sharjah
 - Syrian Gas Company, Syria
 - TGI, Indonesia
 - OGDCL, Pakistan
 - Sohar Refinery, Oman
 - GTCL, Bangladesh
 - and many more

Broad Experience. Value-Add Delivery.

- Delivers innovative fiscal flow measurement solutions to oil and gas customers, including Natural Gas Metering, Crude Oil/LPG/Condensate Metering and Terminal Automation Solutions with associated Flow Computer/Batch Controller
- Offers solutions for Proving, Filtration, Pressure Reduction, Analyzer System and Customized User Interface
- Supplies metering and proving equipment as integrated systems, designed and tested based on application and operational requirements.
- Provides single-window responsibility to achieve seamless system integration solutions; this frees customers from massive coordination with multiple vendors and help them focus on major project objectives
- Extensive metering solutions experience, engineering capabilities and organizational expertise to field test and support all installed bases around the world, around the clock

Go Yokogawa

- Top-notch integrated metering systems that minimize measurement risk while ensuring high accuracy and reliability
- Solid support for the entire Life Cycle Project Management, from design concept to site commissioning
- Front-end Engineering and Design (FEED) capabilities facilitate real-time information for accurate project planning and execution
- Reliable, rapid and cost-effective solutions across the globe, 24/7.
- Ride on Yokogawa's global leadership, vast service network and broad portfolio of best-in-class products

A Strong Commitment to Our Customers

Our non-stop creative energy is focused on getting the right solution to our customers. We are Yokogawa, a world leader in industrial automation and control, test and measurement, information systems and industry support. Our technology expertise and unyielding focus on the customer have made us a trusted partner worldwide and a strong contributor to industry since 1915.

Custody Transfer Metering System Integration Centre



vigilantplant.[®]
The clear path to operational excellence

SEE
CLEARLY

KNOW
IN ADVANCE

ACT
WITH AGILITY

VigilantPlant is Yokogawa's automation concept for safe, reliable and profitable plant operations. VigilantPlant aims to enable an ongoing state of Operational Excellence where plant personnel are watchful and attentive, well-informed, and ready to take actions that optimize plant and business performance.

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