

Subsea

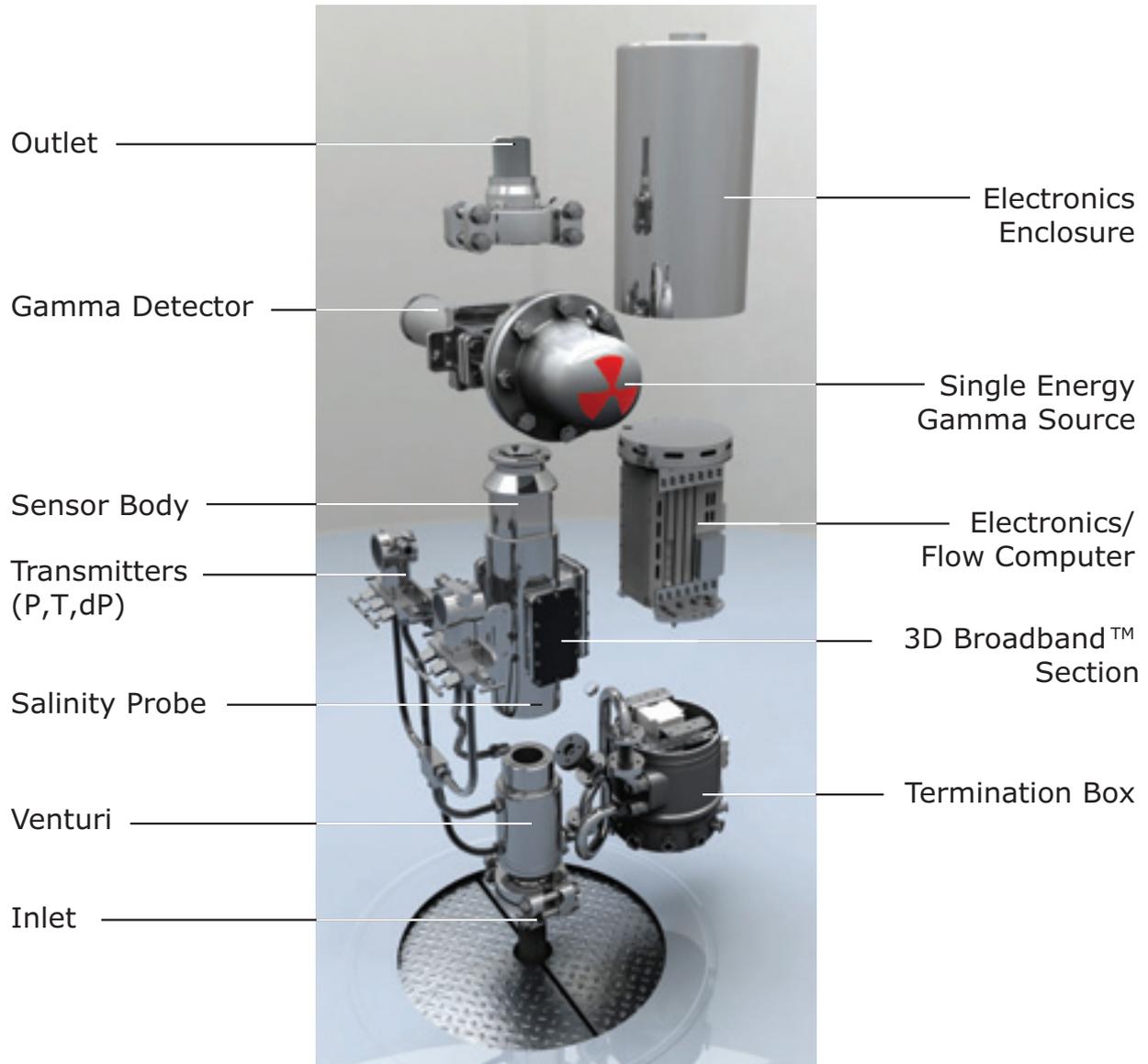


Topside



mpm[®]
MultiPhaseMeters

HighPerformanceFlowmeters[®]



Responding to Oil Industry Needs

Field operators demand that flow measurement devices are reliable, easy to configure and use, accurate, sensitive, and versatile. It is these qualities that the MPM meter embodies. The MPM meter is equally at home in virtually all types of multiphase and wetgas conditions and is unaffected by the flow regime encountered. The envelope of the meter covers the full range of gas void fraction (GVF) and water liquid ratio (WLR).

It is furthermore able to auto-calibrate for changing water salinity and hydrocarbon composition. The MPM meter combines the input from a gamma detector, dP, pressure and temperature transmitters and radio frequency dielectric measurements to form a multi-modal tomographic system. The high-end electronics enable hundreds of real time measurements per second, providing operators with details of the most minute flow event.

An extensive operator-driven test and qualification program was completed, qualifying the MPM meters for use in topside and subsea field applications. The product development and field qualification programs have been supported by:



- **Dual Mode (multiphase & wetgas)**

Meter works equally well over full GVF range and for different flow conditions. At slug flow it switches automatically between modes.

- **Unparalleled Accuracy and Sensitivity**

Accuracy demonstrated during qualification testing approaching the level of single phase metering, on accumulated (allocation) basis.

- **Remote Access and Operation**

Internet access to Graphical User Interface and full functionality via web-interface in MPM flow computer at site.

- **Easy Field Configuration**

Meter is factory calibrated. The user friendly field configuration can even be fully completed at factory prior to delivery.

- **Water Salinity Measurement**

Eliminates the need for water sampling. Automatic update of water configuration data and elimination of potential errors caused by incorrect input data.

- **Self Diagnostics Functionality**

Meter includes a large series of self diagnostics features. These are based on raw data analysis, redundancy and statistical analyses.

- **In-Situ Verification**

Responding to the obvious question: Are meter readings correct? Covers sensor parts as well as configuration data.

- **HP/HT Qualified**

Mechanical integrity verified for pressures of up to 1000 bar (15,000 psi) and temperatures of up to 250 °C (480F). Statement of Compliance issued by DNV.

MPM takes multiphase and wetgas metering to new levels, providing advanced solutions to the flow measurement requirements of our clients

The MPM meter delivers the highest level of operational performance, with a wealth of field experience demonstrating its stability, accuracy and repeatability

Using its patented 3D Broadband technology, the MPM meter is suited to both multiphase and wetgas environments

The MPM meter is unparalleled in terms of performance monitoring, with a patented salinity probe and in-situ verification methods to ensure high performance

“The parallel to MPM’s technology is when the combustion motor replaced the steam engine.

ConocoPhillips

“MPM meter bridges the gap between wetgas and multiphase flow conditions.

Shell

“The new technology represents a major advance in multiphase metering – measuring every droplet.

StatoilHydro

Subsea



MPM advances multiphase and wetgas metering to new levels, satisfying the customer’s needs and requirements.



MPM includes flow tests as part of the standard Factory Acceptance Test, and offers training of field operators at the unique MPM Flow Laboratory. It is made to enable testing of flow meters at field simulated conditions, and has highly accurate reference instrumentation.

www.mpm-no.com

Multi Phase Meters AS P.O.Box 279, Fabrikkveien 21, 4066 Stavanger, Norway.
Phone: +47 51 22 02 00. E-mail: post@mpm-no.com

MPM FZE P.O.Box 262274, Emaar Business Park, Building 2, Office 423, Dubai, United Arab Emirates.
Phone: +971 4368 9890. E-mail: info@mpm.ae

MPM Inc, 16350 Park Ten Place, Suite 211, Houston, TX 77084, USA
Phone: +1 281 646 9991. E-mail: info@mpm-us.com