



## Product Summary

The multiphase flowmeter together with the FourPhase DualFlow desander system provides valuable insight about well productivity through accurate measurement of the four phases without the need for a dedicated production or test separator.

The FourPhase multiphase flowmeter (MPFM) unit is intended to use in offshore rig applications where oil, gas and water will be present at the surface from oil & gas flow back. The purpose of the MPFM is to provide insight to what the well is producing by measuring the fraction of each phase flowing through the unit. The unit consists of a Roxar 2600 multiphase flow meter, inlet manifold, outlet x-over and EXD flow computer within a lifting frame for easy handling. Using the FourPhase control system it can be managed within the same crew enabling a lower POB than traditional operations.

The MPFM has a compact design that enables retrofit on offshore topside assets worldwide. The system provides a safe and efficient process that utilizes a radioactive source to measure the different phases.

In essence, the MPFM ensures no valuable hydrocarbons are lost from production and provide a cleaner production process.



### Market differentiating technology

- FourPhase control system to enable logging of all the operational data related to the 4 phases (Oil, Gas, Water and Solids)
- The solids management crew also manages the MPFM enabling a minimal POB count
- Online visualisation of flow
- Small footprint = 0.8 x 1.0 x 1.4 meter footprint (DxWxH)
- Lightweight solution
- Low power consumption

### Real-time information for quality decisions

- Accurately characterize flow with advanced signal processing and field electronics
- Improve measurement certainty with identification and measurement of non-symmetrical flow in varying flow regimes.



## Technical Specification

SI

U.S.

### Pressure

**Operating Pressure:** 1-250 bar (1 – 3 300 psi) <sup>(A)</sup>**Design Pressure:** 1-345 bar (1 - 5 000 psi)

### Capacity

**Maximum flow rate (fluid):** 6000 Am<sup>3</sup>/d <sup>(B)</sup>**Maximum flow rate (gas):** 12 000 Am<sup>3</sup>/d <sup>(B)</sup>**Multiphase fraction:** 0 - 100% GVF, 0 - 100% WLR

### Dimensions

**Height:** 1 420 mm (4,7 ft)**Width:** 1 000 mm (3,3 ft)**Depth:** 770 mm (2,5 ft)**Weight:** 592kg (1 306 lb)

### Interfaces

**Flow piping:** 3"**Inlet and Outlet Flanges:** 3GR25

### Temperature

**Min operating temp:** -20 °C (-4 °F)**Max operating temp:** +120 °C (+248 °F)

### Certification/Directive

PED

ATEX

Norsok Z-015

DNV GL 2.7-3 R00

ASME B16.5 &amp; B31.3

### Materials

**Meter Body Material:** Duplex, UNS S31803**Pipes:** Duplex, UNS S31803**Frame:** Carbon steel S355**Nuts, bolts:** L7 + Standard galvanic 8.8

### Notes

A) - Multivariable transmitter has an operation range of 0-250bar to ensure sensor accuracy but does not limit the design pressure of the complete system.

B) - Flow rates need to align with the correct venturi insert.