



The **VEGA Multiphase Flow Meter** was developed for in-line measurements of wet gas flow, but the technology is very accurate in all the GVF range. The Vega Meter's operating principle is based upon isokinetic sampling of the gas-liquid mixture. The mixture is then separated and the individual phases are measured. The sample is usually about 10% of the total flowrate and is taken at a position in the meter where the gas and liquid velocity profiles are uniform.

An extremely compact and efficient gas-liquid separator is adopted in the meter cutting down the separation volume to 5% of a conventional well testing system often employed. The meter accurately measures the gas and liquid flowrates and can also be used to directly measure the water flowrate with a reported accuracy of water volume fraction measurements in actual field operations as low as 0.001%



VEGA Multiphase Meter on a platform
Pressure 150 bar
Temperature (-)27 – 100°C
Gas Flow 25 – 150 MMSCFD
Liquid Flow 0-3000 BBLD
Water -cut 0-100%



Applications

- Production Well Testing
- Exploration Well Testing
- Production Allocation
- Hydrate Control
- Formation water monitoring
- Real Time Reservoir Management

Key Benefits

- No γ -source
- Low Cost
- Self calibrating
- Conventional Instruments mounted
- High accuracy liquid detection with 99.99% GVF



General Specifications

Operating performance

Operating Range:	0-100% GVF
Accuracy (turndown 4:1):	
Gas Flow rate (90%<GVF<100%)	2.5 % of reading
Gas Flow rate (0%<GVF<90%)	5 % of reading
Liquid Flow rate (90%<GVF<100%)	5 % of reading
Liquid Flow rate (0%<GVF<90%)	2.5 % of reading
Flow Pattern:	Vertical Downwards
Pressure Drop:	0.3-1 bar
Design Pressure:	up to 650 bar
Design Temperature	up to 150°C

Input and Output

User Input:	Gas composition or density
User Output:	Gas Flow Rate
	Liquid Flow Rate
	Water Flow Rate
	Liquid density
	Water Density
	Pressure
	Temperature

Communication

Analog:	4-20mA output
Digital:	Modbus (Ethernet or Serial)
	Others industries standard on request

User Interface (optional)

Field mounted or control room PC with E-Well software and a Customizable Windows GUI

Mechanical and Electrical Specifications

Material:	Carbon Steel, Duplex S. S. or to customer specifications
Flange connection:	ANSI, API or to customer specification
Pipe Dimension:	2" and up
Environmental Conditions:	(-)29 – 70°C
Humidity:	0-100%
Power Supply:	24 VDC, 100-240 VAC 50-60 Hz
Hazarus Area Approval:	

CENELEC	EExD
UL/C-UL	Class 1 Division 1
ATEX	EEx

