The Accuflow™ JR Series Multiphase Metering system consists of a vertical pipe section, a gas flow line and liquid flow line as shown. Multiphasic fluid (oil, water, gas) enters the vertical pipe tangentially, creating a cyclonic action in the pipe where liquid and gas are separated into separate streams.

Once the liquid and gas are separated, each phase is measured independently using industry proven measurement devices. A conventional liquid meter (coriolis, turbine, etc.) is used to measure liquid flow rate. Water cut measurement can also be obtained using conventional technologies or methods (density differential, microwave, etc.).

Gas flow is also measured using conventional technologies (vortex, turbine, ultrasonic, etc.). After measurement, the gas and liquid streams are recombined and returned to the multiphase flow line.

By properly designing the Accuflow JR, an active liquid level control system is NOT necessary. Liquid level in the vertical section is self-regulated and thus does not require the use of any control valves. It is the implementation of this technique that make the Accuflow JR series a truly low cost and efficient measurement system.
Features
• Simple and compact design
• Entire system made of common steel pipes; no pressure vessels required
• No control valves
• All components are commercially proven technologies
• Very low pressure drop (<3psi)
• Low liquid inventory and fast response

Benefits
• Suitable for various production wells including gas condensate wells
• Low equipment cost
• Easy to transport, install & operate
• Very low maintenance
• Accurate measurement
• Handles wide range of flow rates
• Applicable for 0 to 100% water cut
• Applicable for 0 to 100% gas fraction
• Frequent well testing

Anticipated Accuracy
Liquid flow rate: 1% of reading
Gas flow rate: 5% of reading
Water cut in liquid: 2% absolute

Specification
Footprint: 4’W x 8’L (typical)
Height: 12’
Liquid Rate: consult factory
Gas Rate: consult factory
ANSI rating: 150#, 300#, 600# and 900#