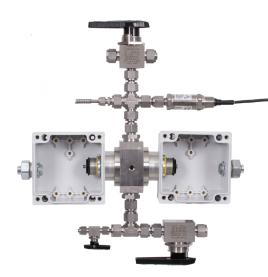
# **VeraSIGHT<sup>™</sup> Optical Flow Cell**

In-Line Multi-Stream Measurement of Hydrocarbon Composition, API Gravity, Vapor Pressure, BTU, and Other Properties in Natural Gas, NGL, Condensate, Crude Oil and Refined Products





VeraSIGHT Flow Cell and Probes



VeraSIGHT Assembly

#### Measure in the Pipeline at Operating Pressure and Temperature

The VeraSIGHT flow cell is installed directly in the process at operating pressure and temperature requiring no sampling or conditioning systems. A flow bypass loop allows the process to flow through the cell where the measurements are made. The stream then flows back into the main process resulting in no requirement for product loss or disposal. The flow cell is connected to the analyzer by a single pair of fiber optic cables and is rated for Class 1 Div 1 or Zone 1 service.

#### **Unmatched Optical Performance**

The VeraSIGHT and the Verax<sup>™</sup> Analyzer family are designed to provide the best system performance possible. With a very high signal to noise ratio and optimized optical path, this system delivers highly repeatable measurements regardless of process or condition changes. The flow cell and probes perform equally well in gas or liquid applications. A single Verax Analyzer can support up to eight flow cells which can be any combination of gas and liquids.

#### **Onboard Temperature and Pressure Measurement**

In addition to the optical probes, the flow cell contains pressure and temperature sensors and an integrated sample port. The process temperature and pressure measurements are readily available through the Verax Analyzer and can be passed through to plant control or information systems.

#### **Rugged Maintenance Free Design**

The VeraSIGHT flow cell and probes are designed utilizing 316L SST and extremely rugged sapphire probes. The cell is designed to be virtually maintenance free with no recommended scheduled maintenance. In the rare event that maintenance is needed, the cell is designed to be easily disassembled and reassembled with no process downtime required.

### VeraSIGHT Optical Flow Cell

## Specifications

Applications	Fluid Streams	Type: Natural Gas, NGL, Condensate, Crude Oil, Refined Products Phase: gas or liquid Upstream, Midstream, Downstream Applications	
	Property Analysis	Can be correlated to any GPA or ASTM primary test method to provide compositional and property measurements for the process fluid.	
	Sample System	None Required	
	Calibration Gas	None Required	
	Line Pressure	0-1750 psig	
	Line Temperature	-20° to 200°F	
	Line Flow Rate	ΔP 1psi minimum between process inlet and return to induce flow	
	Detection Method	NIR spectroscopy with inline optical probes	

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Mounting	Assembly	Unistrut frame or other solid structure
	Process Connection	⅓ inch Liquid or Gas

Electrical	Input Power	None required
	Heater Blanket (Optional)	110-270 VAC

Physical	Wetted Materials	316L SST with Sapphire Windows
	Assembly Dimensions	16"W x 17"H x 5.25"D
	Weight	12 lbs.
	Classification	Intrinsically Safe / Class 1 Div 1 / Zone 1 CRN for AB, BC, SK and ON





