Verax[™] **SSL Analyzer**

Single-Stream Measurement of Hydrocarbon Composition and Physical Properties in NGLs, LPGs, Condensate, Crude Oil and Refined Products



Designed for Fast and Accurate Measurement of Liquids

The Verax™ SSL single-stream liquid analyzer is built upon the same field-proven technology as the Verax CTX. The SSL provides rapid and reliable measurement of key compositional and physical properties for a wide variety of crude, condensate, NGL, LPG, and refined fuel applications. The SSL system is highly reliable, requires neither consumable materials nor sample conditioning, and delivers real-time process measurements with extremely high reproducibility and repeatability. The Verax SSL meets or exceeds applicable GPA and ASTM performance requirements for repeatability and reproducibility. Older, less reliable and maintenance intensive technologies can now be replaced with confidence. The unit can be powered by a small solar panel, or standard 120V AC or 24V DC.



Verax SSL NIR Spectrometer

Measure at the Pipeline at Operating Pressure and Temperature

The Verax flow cell is installed directly on the process at operating pressure and temperature; no sample conditioning system is required. The flow cell may either be directly connected to the analyzer (SSL-I) or tethered by a pair of fiber optic cable (SSL-T), allowing the analyzer to be located away from the process if needed. The Verax SSL supports multiple simultaneous compositional and physical property analyses. JP3's advanced technology means all Verax analyzers produce no emissions and require no carrier gases or calibration standards.



Verax NIR Flow Cell

Solid State Spectroscopy for Rapid Response Time

Using a broadly-tunable Near-Infrared (NIR) optical spectrometer and advanced chemometric techniques, the Verax SSL provides direct process readings for liquids in a matter of seconds. No moving parts, no consumables, and no sample conditioning systems means longer life and reduced maintenance costs. The patented laser source utilizes constant amplitude correction and wavelength calibration to deliver performance that is unmatched in the industry. This swept-source laser provides light intensity strong enough to easily measure even the lowest API gravity crudes.



JP3 Verax's advanced electronics and communication capabilities allow easy integration into your plant networks and systems. Verax also supports monitoring via secure cellular data connection, making even the most remote unmanned applications possible and economical.



Verax SSL Installation









Verax[™] SSL Specifications

Applications	Fluid Streams	 Flow cell read points: SSL-I: 1 integrated flow cell SSL-T: 1 separate flow cell with fiber optic connection Type: NGLs & Purity Products, LPGs, Condensate, Crude Oil, Refined Products; Upstream, Midstream, or Downstream Applications Phase: Liquid 	
	Property Analysis	 Composition: C1-C6+, C1-C9+, C1-C12+, C1-C30+ Physical Properties: API Gravity, BTU, Relative Density/Specific Gravity, Vapor Pressure (RVP, VPCRx, TVP), Boiling Point Curves, RON, MON, Flash Point, Viscosity, and many others 	
	Sample System	None Required	
	Calibration Gas	None Required	
	Line Pressure	• 0-1750 psig	
	Line Temperature	• -20°F to 200°F (-29°C to 93°C); Higher ranges available	
	Flow Requirement	1 psi pressure difference required to induce flow	
	Response Time	• ~15 seconds per analysis point	
	Detection Method	NIR spectroscopy with on-line bypass flow cell	
Electrical	Input Power	 24 VDC / 6A max 100-240 VAC / 1.4-0.65A 12 VDC Solar 	
	Communications	 MODBUS RTU over TCP or Serial (others available upon request) 4.3" Touchscreen Color Display (480 x 272) 	J
	1/0	 3x 4-20mA Analog Input, 1x RTD input Optional analog I/O unit (4x 4-20mA A/O, 2x D/I, 2x D/O) 	For more inform
Physical	Enclosure	NEMA 4X IP 66, Painted 304 Stainless Steel	sales@jp3
	Dimensions	• Control Panel: 16"W x 16"H x 8"D	512-537
	Weight	SSL-I: 50 lbs.SSL-T: Control Panel: 43 lbs.; Flow Cell Assembly: 12 lbs.	4109 Todd Ln. Ste Austin, TX
	Ambient Conditions	 -4°F to 122°F (-20°C to 50°C) Sunshade recommended if >90°F (32°C) 	JP3
	Classification	Enclosure: Class I Division 2, A-D, T4 Class I Zone 2, Group IIC, T4 Certified to UL 61010-1 Certified to CAN/CSA C22.2#61010-1-12 Conforms to ISA 12.12.01 Conforms to CSA C22.2#213 Flow Cell: Intrinsically Safe / Class I Division 1 / Zone 1 CRN for AB, BC, SK and ON	



For more information: sales@jp3.com

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