

# Verax™ CTX™ Analyzer



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



JP3 Verax CTX Analyzer

## One Device Measures Composition and Properties of Gas and Liquids

The Verax CTX represents JP3's latest generation Near-Infrared analyzer designed specifically for oil and gas applications. With faster measurement times, four independent spectrometer detectors, enhanced optical components, and a new flow cell, the Verax CTX provides significant improvements in measurement speed, quality, repeatability, stability, and reliability in even the harshest environments. Natural gas or liquids can be accurately analyzed to obtain hydrocarbon composition, Vapor Pressure, BTU, API gravity, and other physical properties. Verax CTX is now certified for Natural Gas Custody Transfer applications as well.

## Measure in the Pipeline at Operating Pressure and Temperature

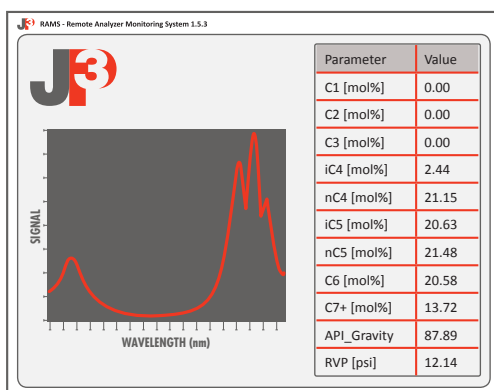
The Verax flow cell is installed directly in the process at operating pressure and temperature requiring no sampling or conditioning systems. The flow cell is connected to the analyzer by a single pair of fiber optic cables allowing the analyzer to be located as close to or far from the process as desired. Each process stream can support any number of compositional and physical measurements. Our advanced technology means the Verax analyzer produces no emissions and requires no carrier gases or calibration gases.

## Solid State Spectroscopy for Rapid Response Time

Using patented Near-Infrared (NIR) optical spectroscopy and advanced chemometric techniques, Verax CTX provides readings in a matter of seconds, directly in both liquid and gas streams. No moving parts, no consumables, and no sample conditioning systems means longer life and reduced maintenance costs. Our patented laser source utilizes constant amplitude correction and wavelength calibration to deliver a source performance that is unmatched in the industry. The swept source laser provides light intensity strong enough to easily measure even the lowest API gravity crudes.

## Internet Ready for Remote Monitoring

Verax's advanced electronics and communication capabilities allow easy integration into your plant networks and systems. Verax also supports 24 x 365 monitoring making even the most remote unmanned applications possible and economical.



Real Time Liquid Condensate from Verax CTX

# Specifications

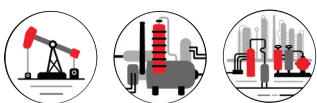
Applications	Fluid Streams	Type: Natural Gas, NGL, Condensate, Crude Oil, Refined Products Phase: gas or liquid Upstream, Midstream, Downstream Applications
	Property Analysis	C1-C6+, C1-C9+, C1-C12+, C1-C30+ API Gravity, BTU, Relative Density/Specific Gravity Vapor Pressure (RVP, VPCR <sub>x</sub> , TVP), CO <sub>2</sub> (Gas), Natural Gas Custody Transfer, Boiling Point Distribution
	Sample System	None Required
	Calibration Gas	None Required
	Line Pressure	0-1500 psig
	Line Temperature	-10° to 150° F (Higher ranges available)
	Line Flow Rate	1 PSI pressure drop required to induce flow
	Response Time	~ 10 seconds per analysis point
	Detection Method	NIR spectroscopy with inline optical probes

Electrical	Input Power	24V DC standard; 100-240 VAC optional Max Power Consumption: 100V @ 1.4A; 240V @ 0.65A; 24V @ 6A
	Communications	MODBUS RTU over Serial or TCP (others available upon request)
	Outputs	8 solid state relays for process control Analog 4-20 mA /0-10 VDC outputs available configurable alarms/controls

Physical	Enclosure	NEMA 4X IP 67 powder coated aluminum
	Dimensions	Control Panel: 24"W x 36"H x 10"D
	Weight	Control Panel: 60 lbs. Flowcell Assembly: 12 lbs.
	Ambient	-4°F to 122°F. No environmental control required; sunshade recommended if >90°F
	Classification	Enclosure: Class I / Division 2 A,B,C,D, T4 Class 1 / Zone 2 IIC Certified to UL 61010-1 Certified to CAN/CSA Std C22.2 No. 61010-1 Conforms to ISA 12.12.01 Conforms to CSA/CSA C22.2 No 213 Flow Cell: Intrinsically Safe / Class 1 Div 1



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Critical Data. Real Time.

