

## Vapor Pressure Analyzer (RVP, VPCR<sub>x</sub>, & TVP) for Crude Oil, Condensate, NGL, and Refined Fuels



JP3 Verax VPA

### Verax VPA Monitors Vapor Pressure in Hydrocarbon Liquids

The Verax VPA allows you to safely measure vapor pressure in crude oil, condensate, NGL, and refined fuels using first principles, traceable to ASTM standards. Verax VPA is built upon the Verax CTX™ which is 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 VPA provides significant improvements in measurement speed, quality, repeatability, stability, and reliability in even the harshest environments. Up to four measurement points can be analyzed with a single unit.

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

Because the Verax VPA measures with flow cells directly in the pipeline at operating pressure and temperature, no sample transport or conditioning systems are required. This design delivers field reliability and uptime that is unmatched by older conventional technologies. Finally, Verax VPA requires no filters, produces no emissions or waste, and requires no scheduled maintenance. Verax easily handles process streams with high paraffin content which is known to cause major issues for conventional analyzers.

### Solid State Spectroscopy for Rapid Response Time

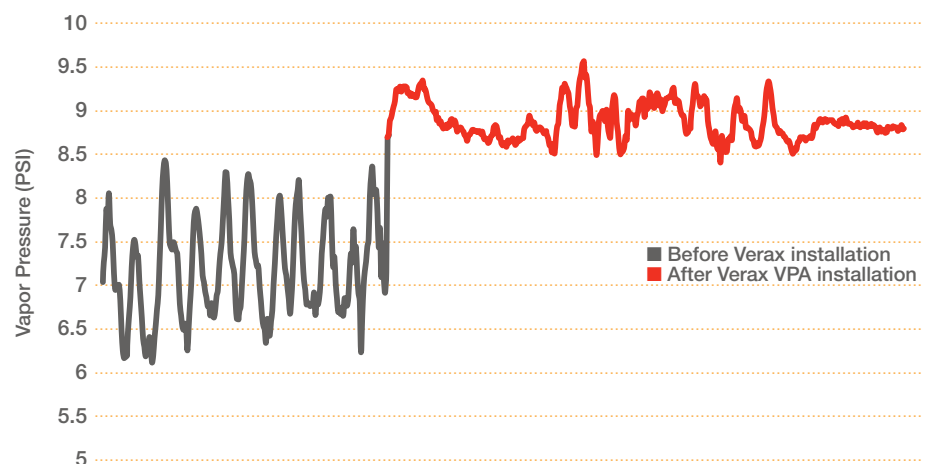
Using patented Near-Infrared (NIR) optical spectroscopy and advanced chemometric techniques, Verax CTX provides readings in a matter of seconds. No moving parts, no consumables, and no sample conditioning systems means longer life and reduced maintenance costs. Our patented laser source utilizes constant amplitude correction and wavelength calibration to deliver a source performance that is unmatched in the industry.

### Real-Time Remote Monitoring

Advanced electronics and communication capabilities provide customers complete real-time measurement and monitoring of their operations, giving them unprecedented levels of plant information and control.

### Vapor Pressure Before & After Verax VPA Control

Customer able to gain real time control of vapor pressure in plant, resulting in greater operational stability and a 2-3% increase in daily plant output.

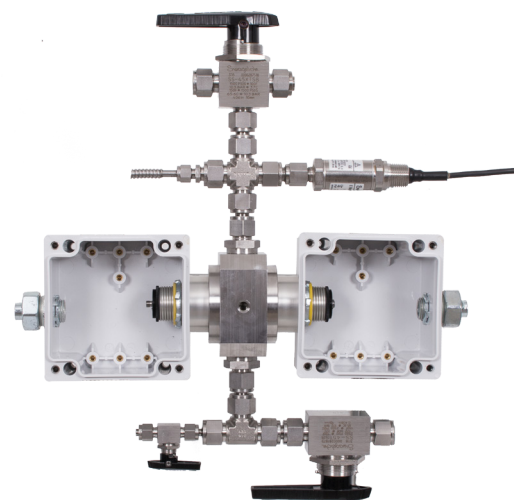


# Specifications

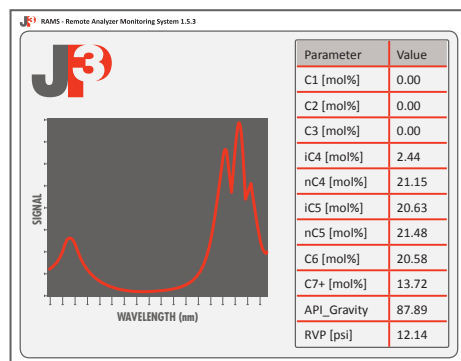
<b>Applications</b>	<b>Fluid Streams</b>	Type: Crude Oil, Condensate, NGL, and Refined Fuels Phase: Liquid
	<b>Property Analysis</b>	RVP, TVP, VPCR <sub>x</sub>
	<b>Sample System</b>	None
	<b>Calibration Gas</b>	None
	<b>Line Pressure</b>	0-1500 psig
	<b>Line Temperature</b>	-10° to 225° F
	<b>Line Flow Rate</b>	Sufficient pressure drop to induce flow
	<b>Response Time</b>	~ 15 seconds per analysis point
	<b>Test Methods</b>	Correlation to: ASTM 323, ASTM 6377, & ASTM 6378, others available
	<b>Detection Method</b>	NIR spectroscopy with inline optical probes

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

<b>Physical</b>	<b>Enclosure</b>	NEMA 4X IP 66 powder coated aluminum
	<b>Dimensions</b>	Control Panel: 24"W x 36"H x 10"D
	<b>Weight</b>	Control Panel: 60 lbs. Flowcell Assembly: 12 lbs.
	<b>Ambient</b>	-4°F to 122°F. No environmental control required; sunshade recommended if >90°F
	<b>Classification</b>	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



VeraSIGHT™ flow cell assembly for use with Verax VPA



Typical Verax VPA measurement package



Critical Data. Real Time.

For more information:  
[sales@jp3measurement.com](mailto:sales@jp3measurement.com)  
 512.537.8450  
 4109 Todd Lane, Suite 200  
 Austin, Texas 78744  
[jp3measurement.com](http://jp3measurement.com)

