Verax™ SSG Analyzer

Single-Stream Measurement of Hydrocarbon Composition, BTU, Relative Density and Other Properties for Natural Gas

Designed for Fast and Accurate Measurement of Liquids
The Verax™ SSG single stream gas analyzer is built upon the same field proven technology as the Verax CTX. The SSG provides rapid and reliable measurement of key compositional and physical properties for a wide variety of natural gas applications. The unit is highly reliable, requires no consumable materials, requires no sample conditioning, and provides fast measurements with extremely high reproducibility and repeatability. Verax SSG meets or exceeds GPA 2261-13 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.

Measure in the Pipeline at Operating Pressure and Temperature
The Verax flow cell is installed directly in the process at operating pressure and temperature and requires no sample conditioning systems. The flow cell may either be directly connected to the analyzer or tethered by a single fiber optic cable, allowing the analyzer to be located away from the process if needed. The Verax SSG supports multiple compositional and physical property analyses. JP3’s advanced technology means all Verax analyzers produce no emissions and require no carrier or calibration gases.

Solid State Spectroscopy for Rapid Response Time
Using patented Near-Infrared (NIR) optical spectroscopy and advanced chemometrics, Verax SSG 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 source performance and stability that is unmatched in the industry. Verax analyzers have eliminated analyzer drift and field maintenance, and the need for field calibration is a thing of the past.

Viper Insight Means Data When You Need It and How You Want It
Verax’s advanced software and communication capabilities allow easy integration into your plant network. Simply log in to Viper Insight™ via your browser for 24 x 365 real-time information. With Viper Insight technology, even the most remote or unmanned application is now possible and economical. Viper Insight’s secure data service application supports laptop, tablet and mobile phone platforms. Near real-time data can be easily accessed from wherever you are. No need to connect to plant systems or third party interfaces to view process performance.
## Specifications

### Applications

| Fluid Streams | Type: Natural Gas  
| Phase: Gas  
| Upstream, Midstream, Downstream Applications |
| Property Analysis | C1-C6+, BTU, Relative Density, CO2 (%)  
| Sample System | None Required  
| Calibration Gas | None Required  
| Line Pressure | 0-1750 psig  
| Line Temperature | -10° to 225°F  
| Line Flow Rate | ΔP between process inlet and return to induce flow  
| Response Time | < 15 seconds  
| Detection Method | NIR spectroscopy with inline optical probe |

### Electrical

| Input Power | Solar 12V DC, 24V DC optional; 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) |
| I/O | (3) AI 4-20mA  
| (1) RTD Input |
| HMI Display | OPTIONAL – Touchscreen Color Display (480 x 272) |

### Physical

| Enclosure | 304 SS NEMA 4X IP 66 |
| Dimensions | Control Panel: 16"W x 16"H x 8"D |
| Weight | Analyzer Assembly: 50 lbs. |
| Ambient | 4°F to 131°F. General purpose. 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 |