

Vx-6101

Verionix

Trace Nitrogen in Helium

Gas Composition Sensor



Sensitivity to 10 PPB

Dual-range capability: 0-10 and 0-100 PPM
Multiple range selection and monitoring alarms available

Fast, Continuous Monitoring at Point-of-Use

< 10 second sampling rate assures timely QC information
Eliminates need for and cost of long sampling lines

Compact: Saves Floorspace, Facilities Costs

No bulky racks, orifices or differential pumps required
No radioactive elements, gas columns, filters or catalysts needed

Sampling Rates as Low as 1 sccm

Reduces product waste, boosts productivity

Applications & Industries

Air separation plants
 Argon purification plants
 Cryogenic truck loading stations
 Speciality gas laboratories
 New production line certification
 Steel manufacturing
 Chemical plants
 Gas management / Gas monitoring
 QC for Truck and Gas bottle fills
 Welding gas management



Verionix Web Viewer Interface speeds sensor data reporting and set-up using a standard Browser

Vx-6101 Trace Nitrogen in Helium Gas Sensor

Overview

Gas Species Detected : Trace Nitrogen in Helium
Process Compatibility: Inert /benign environment
Technology: Optical Emission Spectroscopy using proprietary and integrated SSR microplasma, detector, micro-processor and RF power supply

Performance

<i>Range:</i>	0 to 10 PPM (Low)	0 to 100 PPM (High)
<i>Resolution:</i>	10 PPB	0.1 PPM
<i>Detection Limit:</i>	10 PPB	0.1 PPM
<i>Response Time:</i>	< 30 seconds	< 10 seconds
<i>Accuracy:</i>	± 1.5 % of full scale reading	
<i>Stability:</i>	± 1.5 % of full scale reading (1-σ, 8 hours @ Constant temperature, pressure)	

Gas Sampling Interface

Input Pressure Range: 0.02 to 2 ATM (1 ATM typical)
Input Flow Rate: 1 - 50 sccm (5 sccm typical)
Input Line Fitting: Contact Verionix
Output (Vent) Line Fitting: Contact Verionix
Consumable Filters / Catalysts: None required

Control Interfaces

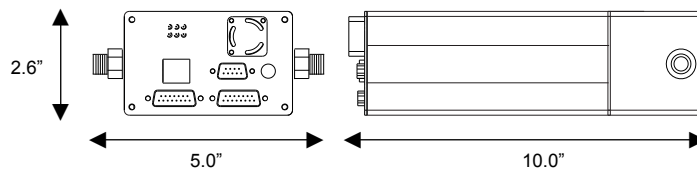
Graphical User Interface: Verionix Web Viewer via Ethernet Interface
Communication Interfaces: RS-232 serial (DB-9 connector)
 Ethernet TCP/IP (RJ-45 connector, Modbus/TCP)
Standard Functionality: User-defined threshold alarms, Over-range alarm, Range selection, Analog signal output, Sensor status using Digital signal lines

Facilities

Operating Temperature Range: 0-50°C (Non-condensing)
Power Requirements: 20-30 VDC @ 3A (AC / DC converter available)
Power Consumption: < 20 watts (typical, steady-state operation)
Carrier Gases: None required
Mounting Options: Side flange suitable for enclosure or wall mounting proximal to gas line

Approximate Dimensions and Weights

Dimensions: 2.6" T x 5" W x 10" L
 (66mm x 126mm x 254mm)
Weight: 4.6 pounds (2.1 kg)



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