

Portable Hydrogen Purity Gas Analyzer

**Vasthi Portable Gas Analyzer
for Checking Hydrogen
(H₂) Purity**

**Compact Size With Excellent Functionality
And Operability Portable Gas Analyzer
With Great Mobility**



Portable Hydrogen Purity Gas Analyzer

Vasthi Portable Hydrogen Purity Gas Analyzer Model VHP- 200 is a lightweight, easy to handle, battery-powered analyzer, used to verify measurements and for spot-checking when other methods provide questionable results.

VHP-200 an intelligent gas analyzer for gas measuring based on the measurement of the thermal conductivity of the ambient gas. To compensate for the influence of temperature and humidity, these are measured separately and a correction is made for them in the micro-controller. Each device is factory calibrated.

Portable analyzers are microprocessor -controlled instrument with sophisticated software process that meets the needs of industry in analyzing the Gas with accuracy and reliability. Its TCD transducer provides highly stable and reliable results.

KEY FEATURES

- Measurement with proven Thermal Conductivity.
- Binary gas composition measurement.
- Vacuum measurement.
- Temperature and humidity compensated
- Temperature range: -20 °C to +55 °C
- Humidity range: 0-100% RH, non-condensing
- Start-up time: 1 second
- T90 sensing and T10 recovery time: 1 second
- Operation: 5 V @ 20 mA, max 10 V @ 20 mA
- Digital output (RS232 optional)
- The large LCD screen with clear display assures simple operation.
- Rugged Construction
- Light Weight
- Different tone, low & very low purity Alarms
- Automatic in operation
- Micro controller technology
- Customer specific configurable
- Suitable for Single or Multiple GAS Analysis
- Long battery backup hours
- Easy calibration in fresh air
- Run-while charging capability
- Virtually maintenance free

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The Vasthi Portable Model VHP- 200 with digital read out and alarms is a direct reading compact portable hydrogen purity analyzer, designed to serve the demanding field requirements of Hydrogen Producing and using industry. It is designed to replace the cumbersome and time consuming Or set apparatus and provide quick and accurate reading of Hydrogen Purity. It offers the user a distinct advantage in terms of economy, dependability maintenance and ease of operation. The instrument incorporate detector as a transducer. It has adjustable visual and audible alarms at WARN & ALARM levels. The instrument very simple to operate. Just switch it on. Adjust zero control so that indicator shows the reading

MAJOR APPLICATION

- Process analysis
- Continuous emission monitoring
- Optimizing combustion process
- Industries-agriculture, food, Chemical and petrochemical etc.
- Biochemistry (microbes): - Incubator, For fermentation
- Storage and maturation of fruits
- Gas separation
- Iron and steel: - Blast furnace, Converter furnace, Heat treatment furnace, Coke oven (CDQ)
- Clinical medicine: - Oxygen aspirator
- Saving energy: - Boiler, Heat treatment furnace
- Hazard prevention :- Analysis of gases produced through combustion of new building materials
- Ceramic industry :- Tunnel kiln , Cement
- Water and Sewerage water :- Sewerage incinerator
- Thermal treatment :- Generating furnace, Carburization furnace, Annealing furnace
- Agriculture: - Research of photo synthesis
- Chemistry:- Oil refining plant, Petrochemical plant , Gas production plant
- Electronics: - Solder furnace
- Environmental safeguard :- Ambient
- Various scientific experiments:- Laboratory

Portable Hydrogen Purity Gas Analyzer

SPECIFICATION

Measuring Range & Gas

Generator Purity Mode : 0 - 100.0 % H₂ in Air
Generator purge Mode : 0 - 100.0 % H₂ in CO₂
0 - 100.0 Air in CO₂

Minimum Resolution : 0.1 %
Read out : Digital Graphical Display
Sampling mode : Direct Plug - in
Detection Principle : Thermal Conductivity (Katherometer)
Accuracy : +/- 0.2 % of full scale
Response time : less than 10 seconds
Warm up time : 10 seconds

Application Data

Environmental Temperature Range* 20° - to 50° C (-4° to 122° F)
Sample Inlet Pressure 10 to 25 PSIA, 10 PSIG Maximum

Sample Flow Rate 0.1 - 10 L/min (0.2 to 20 scfh)

Electrical & Communications

Input Voltage 100-240 VAC, 50-60 HZ standard
Electrical Storage 12 - Volt, Sealed Lead - Acid Battery
Approx. 8 hours usage time per charge
Current 0.5 A @ 120 VAC during recharging
Alarms Two levels (selectable range)
Warranty One year expect Batteries

ORDERING INFORMATION

0 - 100 . 0 % Range
80 - 100 . 0 % Range

Model - VHP - 200
Model - VHP - 280

{ 0 - 100 . 0 % - H₂ in Air
0 - 100 . 0 % - H₂ in CO₂
0 - 100 . 0 % - Air in CO₂ }

Model - VHP - 300



VASTHI INSTRUMENTS

Plot no: 21 & 22 , Block no: 24, Phase - IV ,
Auto Nagar, Guntur - 522 001, Andhra Pradesh, Inda.

Tel : +91 863 2238 667, +91 738 2708 685, +91 958 1678 685

web: www.vasthi.com,

E: info@vasthi.com, sales@vasthi.com