



Canada

270 Sherman Avenue N.
Hamilton, ON L8L 6N5

Phone: (905) 545 2003 • **Fax:** (905) 545 4248

Email: sales@nova-gas.com or websales@nova-gas.com **United States**

1925 Pine Avenue
Niagara Falls, NY 14301

Phone: (716) 285-0418 • **Fax:** (716) 282-2937

Item # 380 Series, Portable Tri Gas Analyzer for Hydrogen Purging

The Nova 380 Series Tri-Gas Analyzer is designed for monitoring H₂ purity inside a power generator and to monitor the purging procedure during a generator shut down or start up.

The analyzer contains a temperature compensated thermal conductivity (T/C) cell, amplifier board, digital readout, range switch, pressure regulator, gas flow control valve, pump and a flow indicator. A recorder output is optional.

The T/C cell does not burn the sample nor is it consumed in any way, so it has a life

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Specifications

Method of Detection

Temperature compensated thermal conductivity (T/C) cell

Ranges Available	Range 1 : 0-100% H ₂ in Air Range 2 : 0-100% H ₂ in CO ₂ Range 3 : 0-100% Air in CO ₂
Resolution	0.1% of gas measured
Accuracy & Repeatability	±1% F.S except in 85-100% H ₂ in Air range, which is within 0.5% absolute H ₂
Drift	0-100% H ₂ in Air range is ± 0.4% per week H ₂ in CO ₂ or Air in CO ₂ 2% F.S. per week maximum drift
Response Time (T-90)	10-15 seconds to 90% step change - not including sample transport time
Ambient Temperature Range	0 to 50 °C 32 to 120 °F
Linearity	±1.0% of F.S. on H ₂ in Air range. ±2% of F.S. in H ₂ or Air in CO ₂ ranges
Size & Weight	K Style: 9 1/2" L x 7" W x 6 1/2" H @ 12 lbs (24 x 17 x 18 cm @ 3.6 kg) WP Style: 11 1/2" L x 8" W x 7 1/4" H @ 8 lbs (29 x 20 x 18 cm @ 3.6 kg)
Power	AC/DC Operation. 115 VAC, 60 Hz for recharging (220 VAC, 50 Hz available)
Output Options	4-20 mA or 0-1 VDC
Unique Applications	All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova. In many cases, we are able to build an analyzer specific to your needs.
Primary Gas to be Measured	Hydrogen (H ₂)
Industry Type	Power Industry

Applications

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For checking purity of hydrogen (H₂) in H₂-cooled generators and synchronous converters. The Model 380 Series will also monitor the safe purging of H₂ during shut down.

Features

- Rugged design that is easy to operate
- Fast warm up and response
- Monitors 0-100% H₂ in air, 0-100% H₂ in CO₂, 0-100% Air in CO₂
- Rugged long life thermal conductivity cell
- Digital readout meter with backlight
- Rechargeable battery operation
- Modular layout that is easy to maintain
- Built in flow meter, flow control valve and pump
- Built in pressure regulator prevents over pressuring of pump and sensor
- Weatherproof (WP) cabinet with clear lexan cover
- Sample pressure ranges 0.5 PSI to 125 PSI

Options

- Recorder outputs of 0-1 V or 4-20 mA
- Suitcase (K) style cabinet available

Calibration

- Range 1 : Air for Zero, 100% H₂ for Span
- Range 2 : 100% CO₂ for Zero, 100% H₂ for Span
- Range 3 : 100% CO₂ for Zero, Air for Span.