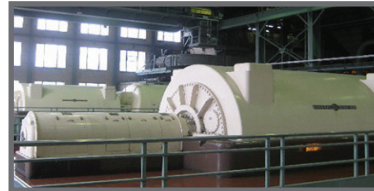


NOVA

Dependable Gas Analysis Solutions

382 SERIES

PORTABLE TRI-GAS ANALYZER FOR HYDROGEN / CARBON DIOXIDE / AIR PURGING WITH SEPARATE OXYGEN DISPLAY



APPLICATIONS

For checking the purity of hydrogen (H_2) in H_2 -cooled generators and synchronous converters, and for monitoring the safe purging of H_2 during shutdown or startup. Will also measure oxygen (O_2) level inside of generator, including during H_2 purity operation.

FEATURES

- Rugged design, easy to operate, fast warm up and response
- Monitors 0-100% H_2 in air, H_2 in CO_2 , Air in CO_2 by rugged long-life thermal conductivity cell
- Long-life electrochemical sensor for separate display of O_2
- Digital readout meters with backlight
- Rechargeable battery operation
- Built-in flow meter, flow control valve, and pump
- Built-in pressure regulator prevents over pressuring of pump and sensor
- Suitcase cabinet has carry handle and is weatherproof when closed
- Sample pressure ranges 0.5 PSI to 125 PSI

RANGES

- **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
- **Separate Range:** 0-25.0 % O_2



NOVA ANALYTICAL SYSTEMS

www.nova-gas.com

DESCRIPTION

The Nova Model 382 Tri-Gas Analyzer with separate O₂ channel is designed for monitoring the H₂ purity inside a power generator and to monitor the purging procedure during a generator shutdown or startup. It can also measure oxygen content in a hydrogen atmosphere. The separate O₂ sensor and display remain active regardless of which other range is selected.

The analyzer contains a temperature-compensated thermal conductivity (T/C) cell, electrochemical O₂ sensor, amplifier board, digital readout, range switch, pressure regulator, gas flow control valve, pump, and a flow indicator. Recorder outputs for active T/C range and O₂ channel are included.

The T/C cell does not burn the sample nor is it consumed in any way, so it has a life expectancy of over 10 years usually. Electrochemical O₂ sensor is also of the long-life style lasting approximately 4-5 years. Measurement results are fast and accurate. A rechargeable 'gel cell' battery provides enough power for about 8 hours of continuous operation and the analyzer can be used while it is being recharged.

SPECIFICATIONS

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

Description	
Method of Detection:	Thermal-conductivity (T/C) cell for H ₂ ; Electrochemical sensor for O ₂
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 Separate Range: 0-25.0 % O ₂
Resolution:	0.1% of gas measured
Accuracy and Repeatability:	Range 1: ± 1% of Full Scale; Range 2 & 3: ± 2% of F.S.; O₂ Range: ± 1% of F.S.
Drift:	H ₂ in CO ₂ , Air in CO ₂ , & O ₂ ± 2% F.S. per week maximum drift, 0-100% H ₂ in Air range is ± 0.4% per week maximum
Response Time (T-90):	10-15 seconds to 90% step change - not including sample transport time
Ambient Temperature Range:	32-120°F (0-50°C)
Linearity:	± 1.0% of F.S. on H ₂ in Air & O ₂ range. ± 2% of F.S. in H ₂ & Air in CO ₂ ranges
Size and Weight :	Approx. 9½" L x 7" W x 6½" H @ 8 lbs (24 x 17 x 18 cm @ 3.6 kg)
Power:	115VAC 60Hz for recharging (220VAC 50Hz 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 at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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