

# NOVA PURIFIER

## Carrier Gas Purifier

He

Purification to Grade N7.5 or Better

Ar



V1.1  
02/02/24

### Features

- Easy-to-use design
- Digital Touch Screen Display
- Available in both 19" Rack and Bench Mount Versions
- Links Seamlessly with all Gas Chromatographs and Gas Analysers
- Purification to Grade 7.5 or better
- Low Voltage design
- Long Term Use

### Impurities Removed

- H<sub>2</sub>O
- H<sub>2</sub>
- O<sub>2</sub>
- N<sub>2</sub>
- Total Hydrocarbons (THC)
- CO
- CO<sub>2</sub>

### Applications

- Purification of Grade N5.5 Helium or Argon to Grade N7.5 or better
- Purifying GC Carrier and Detector gases for:
  - Discharge Ionisation Detector (DID)  
(AGC NovaCHROM 1000 GC)
  - Argon Discharge Detector (ADD)  
(AGC NovaCHROM 2000 GC)
- Zero Gas Purity:
  - Analysers for Trace N<sub>2</sub> in Argon / Helium  
(AGC NovaSTREAM 100)

### About the NovaPURIFIER

The AGC NovaPURIFIER Carrier Gas Purifier ensures a stable supply of purified gas for efficiency and cost effectiveness in gas chromatography and gas analyser systems. The latest revision of this refined instrument is fully automated with a touch screen interface for ease of use. It is available in 19" Rack and Bench Mount versions which can be easily integrated into new or existing set-ups to work in tandem with numerous applications.

The 19" rack configuration links seamlessly with the AGC family of Gas Chromatographs, Gas Analysers and TrendVision Chromatography Software units for a comprehensive gas analysis rack system.

By having a low ppb impurity level in carrier and detector gases, longer instrument life spans and better sensitivities are achieved, thus saving companies both time and money. This high-quality gas is also essential for the operation of sensitive ionisation detectors such as the AGC Discharge Ionisation Detector (DID) and the AGC Argon Discharge Detector (ADD). These two detectors require pure Helium and pure Argon respectively which the NovaPURIFIER provides.

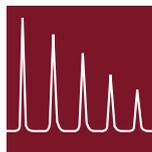
### Principle of Operation

The AGC NovaPURIFIER is based on the heating of purifying pellets which have been coated with a thin oxide layer. When these pellets are heated, impurities in the gas stream passed over them are trapped. By continuously diffusing the impurities into the purifying material, a fresh reactive surface is maintained. This reaction will ensure that the output gas is produced at least a grade better than the input gas.

AGC's unique heater-switching technology for minimum power usage along with a guided regeneration process via the touch screen interface provides a system which is fast, reliable and easy to use.

**AGC**  
INSTRUMENTS

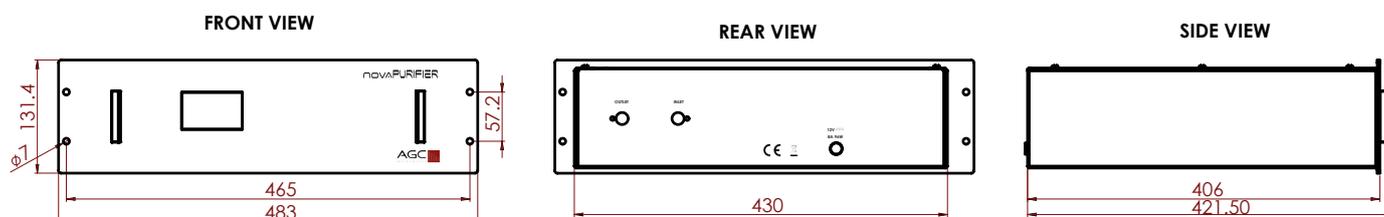
Gas Chromatography since 1965



[www.agc-instruments.com](http://www.agc-instruments.com)

Specification	19" Rack (PUR-804)	Bench Mount (PUR-802)
Operating Temperature	400° Celsius	
Conditioning Temperature	450° Celsius	
Max. Operating Pressure	10 bar (100 kPa)	
*Total Output Level for Impurities Removed	< 0.01 ppm	
**Max. Flow Rate	500 mL/min	
***Lifetime using N6 He/Ar	5 Years @ 200 mL/min	
Standard Fittings	1/8" VCR	
Power Requirements	24V DC 8A 96 Watts	
Nett Weight	9 Kg	5.5 Kg
Dimensions	483 x 405 x 130 mm (WxDxH)	140 x 300 x 280 mm (WxDxH)

- \* Each impurity removed to less than 1 ppb (subject to the quality of the incoming gas) based on 10 ppm total inlet impurities at suggested maximum flow rate.
- \*\* At 1 Atm operating pressure, higher flow rates can be used at higher operating temperatures.
- \*\*\* Lifetime based on suggested maximum flow rate. A higher flow rate will proportionally decrease the lifetime while a lower flow rate will increase the lifetime. The lifetime is rated at 1 ppm total inlet impurities; higher or lower inlet impurity levels will decrease or increase the lifetime proportionately.



## Company Profile

### AGC Instruments Ltd.

AGC Instruments is a leading manufacturer of Gas Analysis Solutions to all users requiring a Quality Control or identification of their gas stream. We have over 50 years' experience in providing our customers with their "Total Gas Analysis Solutions". We work closely with all customers to ensure they obtain the analytical solution that meets their needs and a system that is easy to use and understand. All AGC distributors are extremely experienced and factory trained to the highest standards, offering you a complete after sales support service.

The wide range of Detectors available can be customised to measure unique gas streams and we place an emphasis on the continuous development of our analytical solutions. Our worldwide reach with strategic partners ensures that you have peace of mind and after sales care that are important to your operations.

## Aftersales Care

AGC Instruments are committed to providing and maintaining quality systems from customer liaison to technical knowledge through to System Design and Delivery. We believe that our After Sales Support to the customer is one of the most important services we can offer. Each Distributor has been carefully selected and trained to ensure our customers receive the best possible service. Furthermore, online customer support and direct support are available to deliver a comprehensive support package.

For further information please contact:

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