Laboratory Gas Generator

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Lab Hydrogen Generator

This series laboratory hydrogen generator is highly favoredby laboratory personnel due to its small volume, stable gas output,highpurity, reliability and safety.

01 Features

- Can replace hydrogen high-pressure cylinder, safe and reliable, no need to carry back and forth, boot immediately produce hydrogen, flexible and convenient
- Low maintenance costs, normal use only need to add pure water can be used continuously
- Digital display hydrogen production, easy to observe the working state of the instrument and fault judgment
- large capacity water storage, so that a water can be up to several days of continuous uninterrupted operation
- The purification tube of the one-time drawing mold reduces the leakage point and more likely protects the reliability of the instrument
- Two check valves, double protection to prevent the instrument from returning liquid

02 Specifications

Output flow	0-300/500ml/min
Output pressure	0-0.4 Mpa
Pressure stability	< 0.2%
Hydrogen purity	> 99.999%
Tank volume	3 liters
Water quality requirement	Resistivity ≥1MΩ/cm
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0 to 40 ℃
Ambient humidity	< 85%

SPE High-purity Hydrogen Generator

SPE high-purity hydrogen generator is a device that uses a Solid Polymer Electrolyte (SPE) membrane to produce high-purity hydrogen. It is commonly used in the laboratory and industrial fields to provide a hydrogen source for experiments or production processes that require high purity hydrogen.

01 Features

- Hydroelectrolysis: SPE high-purity hydrogen generators produce hydrogen and oxygen by electrolysis of water (H2O). In this process, water molecules are broken down into hydrogen and oxygen.
- Purity control: By using SPE membranes as electrolytes, the entry of impurity ions can be reduced, thereby increasing the purity of the hydrogen produced.
- Safety features: Modern high-purity hydrogen generators are usually equipped with safety devices such as pressure regulators, overvoltage protection, and temperature control systems to ensure that the equipment operates under safe conditions.

02 Specifications

Hydrogen purity	>99.999%
Output pressure	0-0.4Mpa
Pressure stability	<0.2%
Liquid tank volume	3 liters
Water quality	Resistivity ≥1 MΩ /cm
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

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Lab Air Generator

IGPA series air generator provides clean and dry air, adopts cold and dry operation mode, provides a full set of air purification solutions, can provide customized processing services, and tailor-made for your own exclusive products.

01 Features

- Bipolar purification pipe filtration system, making the inlet and outlet air source pure and dry.
- Stainless steel gas storage tank, passivated stainless steel pipeline with electrolytic polishing and ultrasonic cleaning
- Built-in low pressure oil free low noise air compressor, make your laboratory work more quiet and comfortable
- Low pressure solenoid valve for equipment continuous uninterrupted work, suitable for online unmanned environment

02 Specifications

Output flow	0-3000/5000ml/min
Output pressure	0-0.4Mpa
Pressure stability	<0.2%
Working noise	50~55dB(A)
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

Air Generator

Air generator is a device used to produce, purify, and deliver compressed air. It is commonly used in situations where clean, dry, oil-free air is needed, such as laboratories, medical equipment, and pneumatic tools.

01 Features

- Suction process: The air generator first draws ambient air through an intake filter to remove dust and impurities.
- Compression process: The inhaled air is then compressed. This is usually done by a compressor (such as a piston or screw type).
- Purification process: The compressed air then passes through a series of purification processes, including cooling, water removal, and filtration, to further remove water vapor, oil vapor, and other contaminants.
- Output: The purified dry and pure air is supplied for use through the output pipeline.

02 Specifications

Output flow	50-60L/min
Output pressure	0-0.4MPa
Pressure stability	<0.2%
Working noise	50~55dB(A)
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

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Zero Level Air Purifier

Zero level air purifier is a device specifically designed to produce high-purity air, mainly used in situations where very low impurity concentrations are required, such as gas or carrier gas for gas chromatography (GC) detectors

01 Features

- Efficient precious metal catalyst, can deeply remove the total impurities in the air;
- Modular controller, accurate temperature control, multiple protection more secure;
- Multiple filtration to ensure gas quality;
- High precision pipeline, higher gas quality;
- Small size, low noise, can be used directly in the terminal;
- Optional ultra-pure zero air purifier, higher air quality.

02 Specifications

Output flow	1-60L/min (unusual flow can be customized)
Output pressure	0-0.4MPa
Pressure stability	<0.2%
Working noise	50~55dB(A)
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

Zero Level Air Generator

Zero level air generator is a specialized equipment developed for purifyingclean air from environmental gases, used for preparing standard mixturesand calibrating analytical instruments for different needs such as zero point.lts catalyst provides high performance,catalyzing the cracking of totalhydrocarbons in compressed air to produce zero level air with hydrocarbonsbelow 0.1ppm. At the same time, it can be combined with the GASPU ultrapurezero air purifier to produce ultra purezero level air.

01 Features

- Integrated design, built-in air compressor;
- Efficient precious metal catalyst, can deeply remove the total impurities in the air;
- Modular controller, accurate temperature control, multiple protection more secure;
- Multiple filtration to ensure gas quality;
- High precision pipeline, higher gas quality;
- Small size, low noise, can be used directly in the terminal;
- Optional ultra-pure zero air purifier, higher air quality.

02 Specifications

Air flow	1~500L/MIN (unusual flow can be customized)
Total hydrocarbon	≤0.1ppm; CO 0.1 PPM or less; CO2 0.1 PPM or less; H2O≤1ppm
Air pressure	Adjustable from 0.2-0.6Mpa.
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

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Lab Nitrogen Generator

The IGPN series of nitrogen generators provide purging gas and carrier gas for instruments such as gas chromatographs, Fourier Infrared transform spectrometers (FT-IR), total organic carbon analyzers (TOC), nuclear magnetic resonance (NMR) and thermal analyzers.

01 Features

- Can replace high-pressure cylinders, double cathode stainless steel electrolytic separation pool, electrolytic nitrogen, boot gas production, flexible and convenient
- Low maintenance costs, normal use only need to add pure water can be used continuously
- The unique anti-reflux device, so that the instrument no reflux phenomenon, three levels of purity to achieve better purification
- Large capacity water storage, so that a water can be up to several days of continuous uninterrupted operation
- The purification tube of the one-time drawing mold reduces the leakage point and more likely protects the reliability of the instrument

02 Specifications

Output flow	0-300/500ml/min
Output pressure	0-0.4Mpa
Pressure stability	<0.2%
Nitrogen purity	>99.95%
Liquid tank volume	3L
Water quality requirements	Resistivity≥1MΩ/cm
Power supply	220v±10%, 50-60Hz
Ambient temperature	0-40℃
Ambient humidity	<85%

Membrane Separation Nitrogen Generator

Membrane separation nitrogen generator is a nitrogen production methodthat utilizes membrane components as core components. Under certainpressure conditions, oxygen, nitrogen, water , and other gases in the air havedifferent diffusion rates within the membrane module. Oxygen, water, carbondioxide, and other gases have a faster diffusion rate, while inert gases suchas nitrogen and argon have a slower diffusion rate,thus achieving gasseparation at both ends of the membrane module.Membrane separationnitrogen production equipment has the advantages of fast nitrogenproduction speed, lightweight equipment, easy movement, no moving parts,stable and reliable operation, and simple operation.

This product is a centralized gas supply method for laboratory use of nitrogengas.The purity of nitrogen gas is between 95% and 99.5%, and the nitrogenflow rate can be selected between 10OL/MIN and 30OLMin.

01 Features

- Using imported membrane components as the core, long service life;
- Fast nitrogen production, generally boot 10 minutes to achieve the specified purity;
- Equipment structure is simple, no moving parts, high reliability;
- The equipment is lightweight, easy to move, and can be flexibly installed in various environments;
- Equipped with oxidation wrong type nitrogen purity detection instrument, long service life;
- Nitrogen indicators are displayed online, which is easy to operate.

02 Specifications

Nitrogen flow rate	100L/ min-300 L/min
Nitrogen purity	95~99.5%
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

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High Purity Nitrogen Generator

High purity nitrogen generator is a type of nitrogen that can separate high purity nitrogen from compressed air. High-purity nitrogen has a wide range of uses in laboratory and industrial applications, such as as a carrier gas for gas chromatography (GC) or to provide a stable nitrogen source in analytical instruments such as liquid-mass coupling (LC-MS). Because of its ability to produce nitrogen on demand on site, avoiding the inconvenience and safety risks caused by the use of high-pressure cylinders, high-purity nitrogen generators have gradually become the preferred nitrogen supply equipment in laboratories and industrial fields

01 Features

- Can replace high-pressure cylinders, double cathode stainless steel electrolytic separation pool, electrolytic nitrogen, boot gas production, flexible and convenient
- Low maintenance costs, normal use only need to add pure water can be used continuously
- The unique anti-reflux device, so that the instrument no reflux phenomenon, three levels of purity to achieve better purification
- Large capacity water storage, so that a water can be up to several days of continuous uninterrupted operation
- The purification tube of the one-time drawing mold reduces the leakage point and more likely protects the reliability of the instrument

02 Specifications

Output pressure	0-0.4Mpa
Pressure stability	<0.2%
Nitrogen purity	>99.99%
Liquid tank volume	3 liters
Water quality	Resistivity ≥1 MΩ /cm
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40°C
Ambient humidity	<85%

Zero Level Nitrogen Purifier

Zero level nitrogen purifier is a device capable of separating high-purity nitrogen from compressed air, mainly used in laboratory and industrial fields to provide high-quality nitrogen sources

01 Features

- Can replace high-pressure cylinders, double cathode stainless steel electrolytic separation pool, electrolytic nitrogen, boot gas production, flexible and convenient
- Low maintenance costs, normal use only need to add pure water can be used continuously
- The unique anti-reflux device, so that the instrument no reflux phenomenon, three levels of purity to achieve better purification
- Large capacity water storage, so that a water can be up to several days of continuous uninterrupted operation
- The purification tube of the one-time drawing mold reduces the leakage point and more likely protects the reliability of the instrument

02 Specifications

Output pressure	0-0.4Mpa
Pressure stability	<0.2%
Nitrogen purity	>99.99%
Liquid tank volume	3 liters
Water quality	Resistivity ≥1 MΩ /cm
Power supply	220v±10%, 50-60Hz
Operating ambient temperature	0-40℃
Ambient humidity	<85%

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Nitrogen Air Integrated Machine

IGPT series is a set of nitrogen, hydrogen, air generator as one of the instrument, to meet the market demand, suitable for all kinds of gas chromatographs at home and abroad, can provide customized processing services, tailored for your own exclusive products.

01 Features

- Nitrogen hydrogen air integrated machine is a set of nitrogen, hydrogen, air generator as one of the instrument.
- Stainless steel gas storage tank, passivated stainless steel pipeline with electrolytic polishing and ultrasonic cleaning
- Built-in low pressure oil free low noise air compressor, make your laboratory work more quiet and comfortable
- Low pressure solenoid valve for equipment continuous uninterrupted work, suitable for online unmanned environment

02 Specifications

Output flow/purity	Nitrogen 0-300/500ml/min / >99.999%
	Hydrogen 0-300/500ml/min / >99.999%
	Air 0-3000/5000ml/min
Output pressure	0-0.4 Mpa
Pressure stability	< 0.2%
Liquid tank volume/Water quality requirements	Nitrogen 3 L/resistivity ≥ 1MΩ/cm
	Hydrogen 3 L/resistivity ≥ 1MΩ/cm
Working noise	Air 50~55dB(A)
Power supply	220v±10%, 50-60Hz
Ambient temperature	0 to 40 ℃
Ambient humidity	< 85%

Nitrogen Air Integrated Machine

IGNA series is a set of nitrogen, air generator as one of the instrument, to meet the market demand, suitable for all kinds of gas chromatographs at home and abroad, can provide customized processing services, tailored for your own exclusive products.

01 Features

- Nitrogen air integrated machine is a set of nitrogen, air generator as one of the instrument.
- Stainless steel gas storage tank, passivated stainless steel pipeline with electrolytic polishing and ultrasonic cleaning
- Built-in low pressure oil free low noise air compressor, make your laboratory work more quiet and comfortable
- Low pressure solenoid valve for equipment continuous uninterrupted work, suitable for online unmanned environment

02 Specifications

Output flow/purity	Nitrogen 0-300/500ml/min / >99.999%
	Air 0-3000/5000ml/min
Output pressure	0-0.4 Mpa
Pressure stability	< 0.2%
Liquid tank volume/Water quality requirements	Nitrogen 3 L/resistivity ≥ 1MΩ/cm
Working noise	Air 50~55dB(A)
Power supply	220v±10%, 50-60Hz
Ambient temperature	0 to 40 ℃
Ambient humidity	< 85%

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Hydrogen Air Integrated Machine

IGHA series is a set of hydrogen, air generator as one of the instrument, to meet the market demand, suitable for all kinds of gas chromatographs at home and abroad, can provide customized processing services, tailored for your own exclusive products.

01 Features

- Hydrogen air integrated machine is a set of hydrogen, air generator as one of the instrument.
- Stainless steel gas storage tank, passivated stainless steel pipeline with electrolytic polishing and ultrasonic cleaning
- Built-in low pressure oil free low noise air compressor, make your laboratory work more quiet and comfortable
- Low pressure solenoid valve for equipment continuous uninterrupted work, suitable for online unmanned environment

02 Specifications

Output flow/purity	Nitrogen 0-300/500ml/min / >99.999%
	Hydrogen 0-300/500ml/min / >99.999%
	Air 0-3000/5000ml/min
Output pressure	0-0.4 Mpa
Pressure stability	< 0.2%
Liquid tank volume/Water quality requirements	Nitrogen 3 L/resistivity ≥ 1MΩ/cm
Working noise	Air 50~55dB(A)
Power supply	220v±10%, 50-60Hz
Ambient temperature	0 to 40 ℃
Ambient humidity	< 85%

Zero Air and Zero Nitrogen Integrated Gas Supply Equipment

On the basis of zero level air generator, to meet the needs ofsome users who need high-purity air and nitrogen at the same time, we provides you with an integrated zero level air and nitrogen supplyequipment.The equipment uses high-efficiency precious metal catalyststhat can remove total hydrocarbons from the air,reducing theirconcentration to 0.1ppm. The basic equipment can be equipped with a buit-in air compressor, without the need for an external gas source.At the sametime, on the basis of zero level air, a nitrogen generator is configured tooutput zero level nitrogen.

01 Features

- Highly integrated design, easy to operate;
- Efficient precious metal catalyst, deep removal of total warp;
- Modular controller, accurate temperature control, multiple protection more secure;
- Large output gas volume to meet the needs of centralized gas supply;
- Multiple filtration and purification, higher air quality;
- Air/nitrogen output at the same time, easy to use;
- High precision pipeline to ensure gas quality;
- With air compressor, it can be used at any time.

02 Specifications

Zero air flow	5-50L/min
Total warp content	≤0.1ppm; CO 0.1 PPM or less; CO2 0.1 PPM or less; H2O≤1ppm
Nitrogen flow	1L/ min-30 L/MIN Optional
Nitrogen purity	95%~99.5% optional
Power supply	220V 50Hz

Argon purifier

Argon purifier is mainly used to purify argon gas foranalytical instrument protection, argon gas for metallurgical protection, andprotective gas for new materiall production. This series of argon purifiers canbe used in conjunction with direct reading spectrometers,fluorescencespectrometers, glow spectrometers, plasma spectrometers,and otherspectrometer companies produced by American thermoelectric,GermanSpark, German OBLF,Swiss ARL,Japanese Shimadzu, ltalian NAC, etc., toensure the accuracy and stability of analytical data.

01 Features

- The requirement for raw argon is not high, the general bottled pure argon, liquid argon or better pipeline argon can be used;
- High catalyst activity, large adsorption capacity, low working temperature, more energy saving equipment;
- It is renewable, and can be used for a long time by repeated regeneration after failure;
- Regeneration does not require hydrogen or vacuum, and a small amount of argon gas purified by the machine is used for regeneration, safe and reliable;
- All valves are stainless steel bellows valves, almost no leakage;
- For the double structure, one group works, the other group is regenerative and standby, continuous gas supply.

02 Specifications

Raw gas requirements	99.9% general bottled pure argon, liquid argon, pipeline argon, impurity O2<1000ppm; H2O<1000ppm
Output pure gas	≥99.9998% impurity O2≤0.5ppm; H2O≤1ppm(i.e., dew point ≤-70°C); CO + CO2 0.1 PPM or less; Dust particle number (≥0.3um)3~5 / L, S, P oxides ≤ 0.1ppm
Working pressure	0-1.0MPa
Treatment gas volume	0-4Nm3/h

6N Argon Purifier

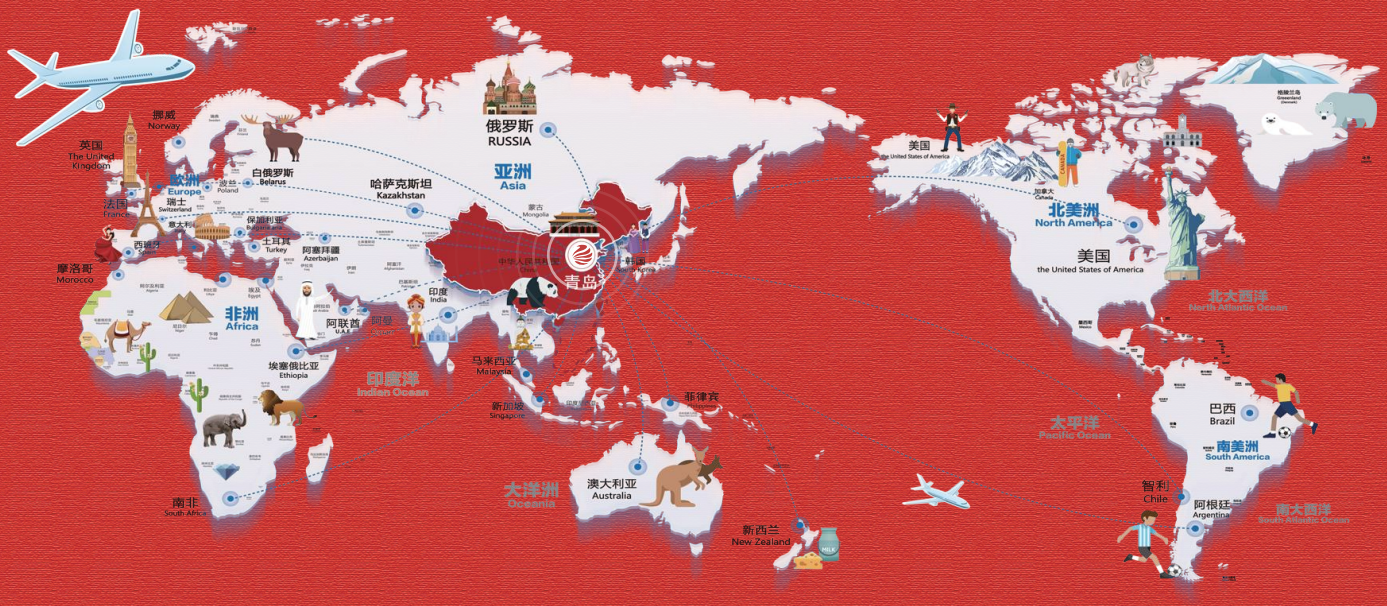
The principle of argon purifier is to use the properties ofzirconium alloy adsorbents that can react with impurities such as oxygen,nitrogen, water, carbon dioxide, and hydrocarbons at high temperatures togenerate stable compounds or solid solutions, in order to remove the above-mentioned impurities from inert gases such as argon,helium,neon,andxenon, and achieve the purpose of purification. The purified high-purity gashas been widely used in the analysis and scientific research of industriessuch as semiconductors，electronics，metallurgy，lithium batterymanufacturing,and optical fibers.Zirconium alloy adsorbents can not onlyremove more active impurities such as Oz at high temperatures, but also inert.impurities such as N2.

01 Features

- Simple operation: reasonable and optimized structure.
- High purity: Ordinary argon can be purified to 99.9999%, to meet the strict scientific research and industrial needs.
- Low maintenance cost: Due to high catalyst activity, large adsorption capacity and low operating temperature, the equipment runs stably, has high reliability and has low maintenance cost.
- Renewable use: The equipment can be used for a long time through repeated regeneration, and the regeneration process uses its own gas purging, without the use of hydrogen, and there is no safety risk.

02 Specifications

Raw gas requirements	≥ 99.9% general bottled pure argon, liquid argon, bottled helium; O2<200ppm; H2O<1000ppm,N2≤100PPm
Output pure gas	≥99.9999% O2≤0.2PPm; H2O≤1PPm(i.e., dew point ≤-76°C); N 0.5 PPm or less; CO + CO2 0.1 PPm or less; Number of dust particles (≥ 0.3um) 3-5 / L;
Working pressure	0-1.0MPa
Processing gas volume	0-4Nm3/h



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