

9N Series High Performance Gas Purification Products

- 9NP Series POU Gas Purifier
- P9 Series POU Gas Purifier
- 9NG Series Getter Type Gas Purifier
- 9NS Series Gas Purification System
- 9NS-IM/OM/CM Series CH₄ Removal Gas Purification System
- 9NSG Series Purification System Capable of Removing N₂
- 9NCS Series Low temperature Gas Purification System

7N Series Economical Gas Purification Products

- 7NP Series POU Gas Purifier
- 7NG Series Getter Type Gas Purifier
- 7NS Series Gas Purification System
- 7NS-IM/OM Series CH₄ Removal Gas Purification System
- 7NSG Series Series Purification System Capable of Removing N₂
- 7NCS Series Low temperature Gas Purification System
- 7NC Series Low temperature Gas Purifier

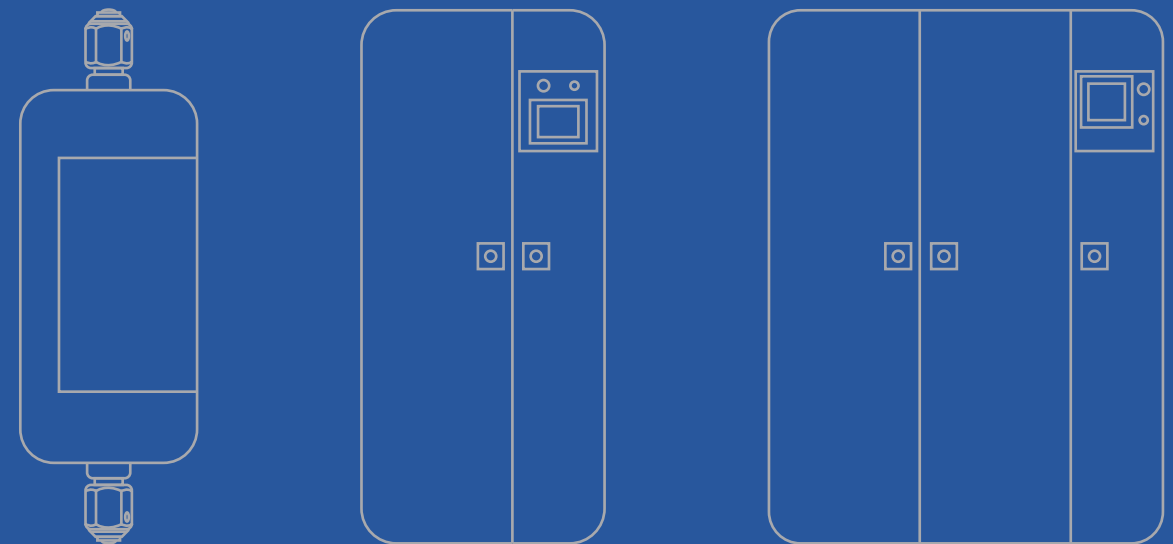
HP/UP (High/Ultra High Pressure) Series Gas Purification Products

- 9NP HP Series POU Gas Purifier
- 7NP HP Series POU Gas Purifier
- 7NK HP/UP Series Gas Purification System
- 7NG HP/UP Series Getter Type Gas Purifier
- 7NC UP Series Low temperature Gas Purification System

GC Series Low Flow Gas Purifier for Gas Analytical Instruments

9N SERIES

High Performance Gas Purification Products



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Shanghai SimPure Technology Co., Ltd.

SIMPURE
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Product Overview

SimPure 9N series high performance gas purifiers include POU(Point-of-Use) gas purifier, getter-based gas purifier and in-situ regeneration gas purification system which use catalyst/adsorber and getter technologies designed specifically to provide ultra-high purity bulk gases, such as Nitrogen, Argon, Helium, Hydrogen, Oxygen and so forth, and specialty gases, such as Hydride Gas, Carbon Dioxide and so forth. The 9NP series gas purifiers can remove impurities such as H₂O, O₂, CO, CO₂, H₂, CH₄, NMHC, etc. to less than one part-per-billion (ppb) at flow rate from 1slm to 20000Nm³/h.



High-performance purification media with long lifetime.Efficient removal of contaminants to part-per-trillion (ppt) levels.Purity consistency, lifetime, and final purity of high-purity gas are critical.



Globally recognized piping and valve components. Welded and assembled in Class 1000 cleanroom environment.



Each purifier undergoes activation, full functional testing, and rigorous quality inspection prior to shipment.



World-class electrical components including touchscreen, PLC, and temperature controller. Ensures safe and stable system operation.



Products Selection Guide

Gas	Series	Type	Purification Technology	Flow Rate	Outlet Impurity
N ₂ , Ar	9NS	-I	Adsorber	10-20000Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC
N ₂ , Ar	9NS-IM	-IM	Catalyst & Adsorber	10-10000Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC, CH ₄
N ₂	9NG	-N	Getter	1slm-20Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC, CH ₄
Ar, He Ne, Kr, Xe	9NG	-R	Getter	1slm-600Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC, CH ₄ , N ₂
Ar	9NSG	-R	Adsorber & Getter	10-300Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC, CH ₄ , N ₂
O ₂ , CDA	9NS	-O	Adsorber	10-4000Nm ³ /h	H ₂ O, CO ₂ , NMHC, H ₂
CDA	9NS	-X	Adsorber	10-10000Nm ³ /h	H ₂ O, Condensable Organics, Non-Condensable Organics, Volatile Acids, Volatile Bases, Refractory Compounds
CO ₂	9NS	-CX	Adsorber	10-1000Nm ³ /h	H ₂ O, Condensable Organics, Non-Condensable Organics, Volatile Acids, Volatile Bases, Refractory Compounds
CO ₂	9NS	-CZ	Adsorber	10-1000Nm ³ /h	H ₂ O, O ₂ , CO, H ₂ , Condensable Organics, Non-Condensable Organics, Volatile Acids, Volatile Bases, Refractory Compounds
CO ₂	9NS-CM	-CM	Catalyst & Adsorber	1-1000Nm ³ /h	H ₂ O, O ₂ , CO, H ₂ , CH ₄ Condensable Organics, Non-Condensable Organics, Volatile Acids, Volatile Bases, Refractory Compounds
O ₂	9NS-OM	-OM	Catalyst & Adsorber	10-1000Nm ³ /h	H ₂ O, CO, CO ₂ , H ₂ , NMHC, CH ₄
H ₂	9NG	-H	Getter	1slm-30Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , NMHC, N ₂
H ₂	9NS	-H	Adsorber	10-4000Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , NMHC
H ₂	9NSG	-H	Adsorber & Getter	10-300Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , NMHC, CH ₄ , N ₂
H ₂	9NCS	-H	Cryogenic	30-1000Nm ³ /h	H ₂ O, O ₂ , CO, CO ₂ , NMHC, CH ₄ , N ₂ , Ar
CH ₄	9NG	-CH ₄	Getter	1-30slm	H ₂ O, O ₂ , CO, CO ₂ , NMHC, N ₂

*This selection guide does not include POU purifiers. For POU purifiers, please refer to the 9NP/P9 page.

9NP SERIES

SimPure launched the 9NP series high-performance point-of-use (POU) gas purifiers in 2005, widely adopted in semiconductor and related industries for terminal purification. Utilizing ambient-temperature catalyst/adsorber technology, this system removes impurities including H₂O, O₂, CO, CO₂, and NMHC from process gases to below 0.1 ppb through chemical reaction/physical adsorption. It integrates a 0.0015µm particle filter within a 316L stainless steel canister.

Product Features

- ✔

Operates at ambient temperature

✔

High-efficiency purification media

✔

316L stainless steel electro-polished canister

✔

100% factory testing for moisture and oxygen performance guarantee

✔

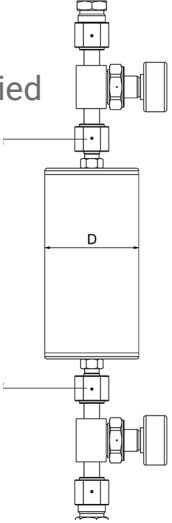
Configurable with 2-valve, 3-valve, or 4-valve assemblies

✔

Consistent purification performance maintained through 100 regeneration cycles
- ✔

100% helium leak detection certified

✔

Factory-regenerable
- 

Purification Specification

Gas Type	Material ID*	Purified Gases**	Regenerable	Outlet Impurity Level
A	101	NH ₃	Yes	H ₂ O, O ₂ , CO ₂ < 0.1ppb
I	201	N ₂ , Ar, He	Yes	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC < 0.1ppb
O	301	O ₂ , CDA	Yes	H ₂ O, CO ₂ , NMHC < 0.1ppb
H	401	H ₂	Yes	H ₂ O, O ₂ , CO, CO ₂ , NMHC < 0.1ppb
C	501	CO ₂	Yes	H ₂ O, O ₂ , CO, H ₂ , NMHC < 1ppb
D	601	CO	No	H ₂ O, O ₂ , CO ₂ < 1ppb Metal carbonyl compounds < 10ppb
F	701	HCl, Cl ₂	No	H ₂ O < 15ppb Fe, Ni, Mo, Cr, Mn < 14ppt Hydrocarbons (toluene) < 1ppt

* Contact SimPure for more gas types and purified gases.

** Purity of inlet gas is no less than 99.999%.

9NP SERIES

General Specifications

Model	Nominal Flow Rate (slm)	Max. Pressure (MPa)	Max. Pressure Drop (MPa)	Outlet Particle Filter (µm)	Inlet/Outlet Fitting	Length (Face-to-Face) L	Outside Diameter D
9NP001	1	1.0	0.1	0.0015	1/4" MVCR	3.3" (84mm)	1.5" (38.1mm)
9NP003	3	1.0	0.1	0.0015	1/4" MVCR	4.5" (114mm)	1.5" (38.1mm)
9NP005	5	1.0	0.1	0.0015	1/4" MVCR	5" (127mm)	1.5" (38.1mm)
9NP015T	20	1.0	0.1	0.0015	1/4" MVCR	3.3" (84mm)	1.5" (38.1mm)
9NP030	30	1.0	0.1	0.0015	1/4" MVCR	6.3" (160mm)	2" (50.8mm)
9NP030L	30	1.0	0.1	0.0015	1/4" MVCR	8.2" (208mm)	2" (50.8mm)
9NP050	50	1.0	0.1	0.0015	1/4" MVCR	7.9" (201.7mm)	3" (76.2mm)
9NP050-L	50	1.0	0.1	0.0015	1/4" MVCR	10" (254mm)	3" (76.2mm)
9NP050-8L	50	1.0	0.1	0.0015	1/2" MVCR	18.2" (462mm)	3" (76.2mm)
9NP300	300	1.0	0.1	0.0015	1/4" MVCR	17.3" (440mm)	4" (101.6mm)
9NP300-8	300	1.0	0.1	0.0015	1/2" MVCR	17.5" (445mm)	4" (101.6mm)
9NP300-8L	500	1.0	0.1	0.0015	1/2" MVCR	20.0" (508mm)	4" (101.6mm)
9NP600	600	1.0	0.1	0.0015	1/2" MVCR	30.9" (785mm)	4" (101.6mm)
9NP999	1000	1.0	0.1	0.0015	1/2" FVCR 1/2" MVCR	28.2" (716mm)	6" (152.4mm)
9NP999-8L	1000	1.0	0.1	0.0015	1/2" MVCR	29.0" (737mm)	6" (152.4mm)
9NP999-12L	1000	1.0	0.1	0.0015	3/4" MVCR	29.5" (749.3mm)	6" (152.4mm)
9NP1300-12	1300	1.0	0.1	0.0015	3/4" MVCR	35.1" (892mm)	6" (152.4mm)
9NP1300-16	1300	1.0	0.1	0.0015	1" MVCR	35.4" (899mm)	6" (152.4mm)
9NP1700-12	1700	1.0	0.1	0.0015	3/4" MVCR	42.7" (1085mm)	6" (152.4mm)
9NP1700-16	1700	1.0	0.1	0.0015	1" MVCR	42.9" (1090mm)	6" (152.4mm)
9NP1999-12	2000	1.0	0.1	0.0015	3/4" MVCR	50.8" (1290mm)	6" (152.4mm)
9NP1999-16	2000	1.0	0.1	0.0015	1" MVCR	51.8" (1296mm)	6" (152.4mm)

* The lifetime varies with the inlet impurities and flow rate. Contact SimPure for application specific lifetime calculations.

P9 SERIES

Launched in 2019, the P9 series achieves optimal balance between high performance and cost-effectiveness with enhanced localization. Employing ambient catalyst/adsorber technology, it reduces impurities such as H₂O, O₂, CO, CO₂, and NMHC in process gases to below 1 ppb through chemical/physical adsorption. It integrates a 0.0015µm particle filter within a 316L stainless steel canister.

Product Features

- ✔ Operates at ambient temperature

✔ Exceptional cost-performance ratio

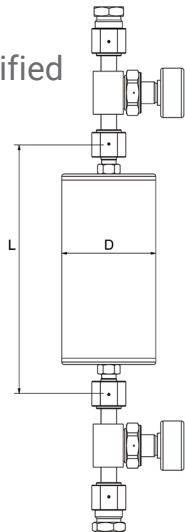
✔ 316L stainless steel electro-polished canister

✔ 100% factory testing for moisture and oxygen performance guarantee

✔ Configurable with 2-valve, 3-valve, or 4-valve assemblies

✔ Consistent purification performance maintained through 100 regeneration cycles
- ✔ 100% helium leak detection certified

✔ Factory-regenerable



Purification Specification

Gas Type	Material ID*	Purified Gases**	Regenerable	Outlet Impurity Level
A	101	NH ₃	Yes	H ₂ O, O ₂ , CO ₂ < 1ppb
I	201	N ₂ , Ar, He	Yes	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC < 1ppb
O	301	O ₂ , CDA	Yes	H ₂ O, CO ₂ , NMHC < 1ppb
H	401	H ₂	Yes	H ₂ O, O ₂ , CO, CO ₂ , NMHC < 1ppb
C	501	CO ₂	Yes	H ₂ O, O ₂ , CO, H ₂ , NMHC < 1ppb
D	601	CO	No	H ₂ O, O ₂ , CO ₂ < 1ppb Metal carbonyl compounds < 10ppb
F	701	HCl, Cl ₂	No	H ₂ O < 15ppb Fe, Ni, Mo, Cr, Mn < 14ppt Hydrocarbons (toluene) < 1ppt

* Contact SimPure for more gas types and purified gases.
** Purity of inlet gas is no less than 99.999%.

P9 SERIES

General Specifications

Model	Nominal Flow Rate (slm)	Maximum flow (slm)	Max. Pressure (MPa)	Max. * Pressure Drop (MPa)	Outlet Particle Filter (µm)	Inlet/Outlet Fitting	Length (Face-to-Face) L	Outside Diameter D
P9-002	2	5	1.0	0.1	0.0015	1/4" MVCR	3.3" (84mm)	1.5" (38.1mm)
P9-004	4	10	1.0	0.1	0.0015	1/4" MVCR	4.5" (114mm)	1.5" (38.1mm)
P9-010	10	20	1.0	0.1	0.0015	1/4" MVCR	6.3" (160mm)	1.5" (38.1mm)
P9-025	25	60	1.0	0.1	0.0015	1/4" MVCR	6.3" (160mm)	2" (50.8mm)
P9-040	40	100	1.0	0.1	0.0015	1/4" MVCR	12.5" (317.5mm)	2" (50.8mm)
P9-060	60	150	1.0	0.1	0.0015	1/4" MVCR	10" (254mm)	3" (76.2mm)
P9-150	150	300	1.0	0.1	0.0015	1/4" MVCR	20" (508mm)	3" (76.2mm)
P9-260	250	500	1.0	0.1	0.0015	1/2" MVCR	20" (508mm)	4" (101.6mm)
P9-500	500	800	1.0	0.1	0.0015	1/2" MVCR	30.9" (785mm)	4" (101.6mm)
P9-900	900	1500	1.0	0.1	0.0015	1/2" MVCR	28.2" (716mm)	6" (152.4mm)
P9-1800	1800	3000	1.0	0.1	0.0015	3/4" MVCR	50.8" (1290mm)	6" (152.4mm)

* Purifier only at nominal flow rating with 1.0 MPa inlet pressure.
The lifetime varies with the inlet impurities and flow rate. Contact SimPure for application specific lifetime calculations.

P9

➡

-A

➡

-B

➡

-C

➡

-D

(Flowrate of purifier)

(Gas type)

(Media code)

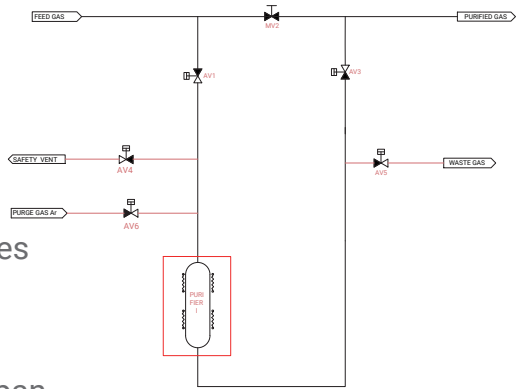
(Isolation valve)

9NG SERIES

The 9NG series employs high-temperature chemical reactions to eliminate impurities including H₂O, O₂, CO, CO₂, NMHC, and CH₄ to levels below 1 ppb. The gas path architecture comprises Getter purification units, precision valves, piping components, and heat dissipation systems. The electronic control system ensures stable operation through real-time temperature monitoring and safety protocols.

Product Features

- ✔ Safety-certified system design
- ✔ 316L stainless steel electro-polished purification chamber
- ✔ Effective nitrogen removal from noble gas/hydrogen mixtures
- ✔ Globally certified valves, fittings, and electrical components
- ✔ Custom-engineered heaters with extended operational lifespan
- ✔ Capable of methane removal from noble gas and nitrogen streams



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
R	Ar, He, Ne, Kr, Xe	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC, CH ₄ , N ₂	< 1ppb
H	H ₂	H ₂ O, O ₂ , CO, CO ₂ , NMHC, N ₂	< 1ppb
N	N ₂	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , CH ₄ , NMHC	< 1ppb
CH ₄	CH ₄	H ₂ O, O ₂ , CO, CO ₂ , NMHC, N ₂	< 1ppb

* Purity of inlet gas is no less than 99.999%.

General Specifications

Model	Nominal Flow Rate* (Nm ³ /h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (μm)
9NG001 - 9NG030	1, 5, 30slm	1.0MPa	0.1MPa	0.003μm
9NG150 - 9NG1500	10, 20, 30, 60, 90Nm ³ /h	1.0MPa	0.1MPa	0.003μm
9NG2000 - 9NG10000	120, 150, 200, 240 300, 400, 500, 600Nm ³ /h	1.0MPa	0.1MPa	0.003μm

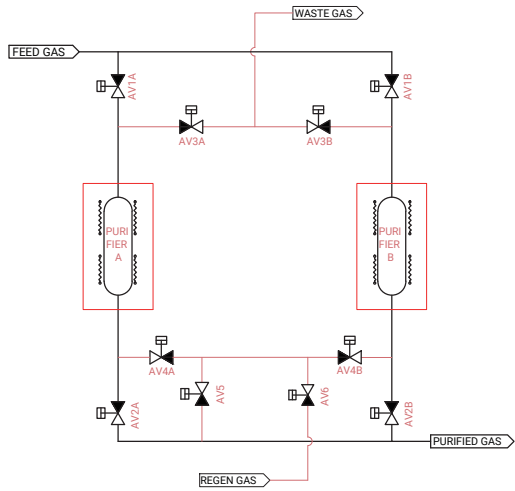
* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

9NS SERIES

The 9NS series combines chemical reaction and physical adsorption at ambient temperature to achieve impurity levels below 1 ppb for H₂O, O₂, CO, CO₂, and NMHC. Its gas path integrates parallel catalytic/adsorbent purification modules, precision valves, and thermal management systems. The PLC-based control system with touchscreen interface enables automated purification cycles, regeneration, and safety monitoring.

Product Features

- ✔ Safety-certified system design
- ✔ Fully automated operation with continuous gas supply
- ✔ Robust and fail-safe system architecture
- ✔ Customized high-performance heaters with extended service life
- ✔ 316L stainless steel electro-polished purification chamber
- ✔ Multi-module design with in-situ regeneration capability upon saturation



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
I	N ₂ , Ar	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , NMHC	< 1ppb
O	O ₂ , CDA	H ₂ O, CO ₂ , NMHC, H ₂ **	< 1ppb
H	H ₂	H ₂ O, O ₂ , CO, CO ₂ , NMHC	< 1ppb
A	NH ₃	H ₂ O, O ₂ , CO ₂	< 1ppb
X	CO ₂	H ₂ O	< 1ppb
		Condensable Organics	< 10ppt
		Non-Condensable Organics	< 10ppt
		Volatile Acids(as SO ₂)	< 10ppt
		Volatile Bases(as NH ₃)	< 10ppt
		Refractory Compounds(as HMDSO)	< 10ppt
CX	CO ₂	H ₂ O	< 1ppb
		Condensable Organics	< 10ppt
		Non-Condensable Organics	< 10ppt
		Volatile Acids(as SO ₂)	< 5ppt
		Volatile Bases(as NH ₃)	< 500ppt
		Refractory Compounds(as HMDSO)	< 5ppt

9NS SERIES

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
CZ	CO ₂	H ₂ O, O ₂ , CO, H ₂	< 1ppb
		Condensable Organics	< 10ppt
		Non-Condensable Organics	< 10ppt
		Volatile Acids(as SO ₂)	< 5ppt
		Volatile Bases(as NH ₃)	< 500ppt
		Refractory Compounds(as HMDSO)	< 5ppt

* Purity of inlet gas is no less than 99.999%.

** H₂ removal (optional)

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NS010 - 9NS200	10, 20, 30, 40 60, 100, 150, 200	1.0MPa	0.1MPa	0.003µm
9NS300 - 9NS1500	300, 400, 600 800, 1000, 1500	1.0MPa	0.1MPa	0.003µm
9NS2000 - 9NS6000	2000, 3000, 4000, 6000	1.0MPa	0.1MPa	N/A
9NS8000 - 9NS20000	8000, 10000, 15000, 20000	1.0MPa	0.1MPa	N/A

* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

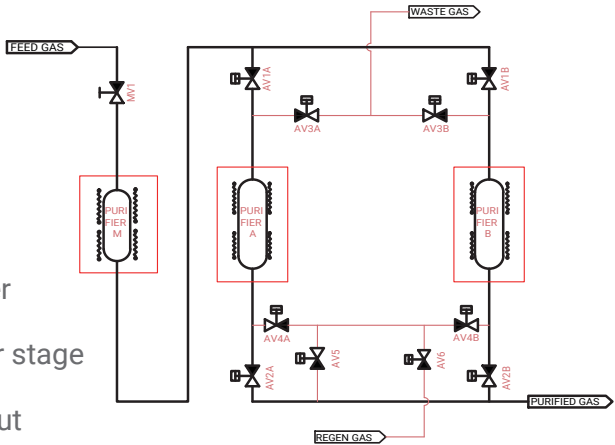


9NS-IM SERIES

The 9NS-IM series integrates high-temperature catalytic conversion with ambient adsorption technology to remove H₂O, O₂, CO, CO₂, NMHC, CH₄, and H₂ to <1 ppb. The gas path combines high-temperature catalytic reactors with parallel ambient purification units, supported by precision valving and heat dissipation. The PLC-driven control system ensures process stability and safety compliance.

Product Features

- ✓ Safety-certified system design
- ✓ Methane purification in inert gas streams
- ✓ 316L stainless steel electro-polished purification chamber
- ✓ Non-regenerative front stage with in-situ regenerative rear stage
- ✓ Uninterrupted automated operation with continuous output
- ✓ Robust and fail-safe system architecture
- ✓ Customized high-performance heaters with extended service life



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
IM	N ₂ , Ar	H ₂ O, O ₂ , CO, CO ₂ , H ₂ , CH ₄ , NMHC	< 1ppb

* Purity of inlet gas is no less than 99.999%.

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NS030 - 9NS200	30, 40, 60, 100, 150, 200	1.0MPa	0.1MPa	0.003µm
9NS300 - 9NS1000	300, 400 600, 800, 1000	1.0MPa	0.1MPa	0.003µm
9NS1500 - 9NS10000	1500, 2000, 3000 4000, 6000, 8000, 10000	1.0MPa	0.1MPa	N/A

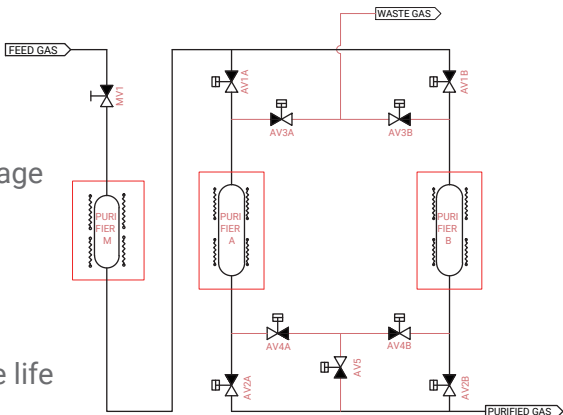
* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

9NS-OM SERIES

The 9NS-OM series utilizes hybrid high-temperature catalysis and ambient adsorption to achieve <1 ppb purity for H₂O, CO, CO₂, NMHC, CH₄, and H₂. Its architecture features a high-temperature catalytic unit coupled with parallel adsorbent modules, complemented by precision valves and thermal controls. The PLC system manages full-process automation and safety protocols.

Product Features

- ✔ Methane removal capability in oxygen streams
- ✔ 316L stainless steel electro-polished purification chamber
- ✔ Non-regenerative front stage with in-situ regenerative rear stage
- ✔ Uninterrupted automated operation with continuous output
- ✔ Robust and fail-safe system architecture
- ✔ Customized high-performance heaters with extended service life
- ✔ Safety-certified system design



Purification Specification

Gas Type	Purified Gases	Impurities	Outlet Impurity Level
OM	O ₂	H ₂ O, CO, CO ₂ , H ₂ , CH ₄ , NMHC	< 1ppb

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NS010 - 9NS200	10, 20, 30, 40 60, 100, 150, 200	1.0MPa	0.1MPa	0.003µm
9NS300 - 9NS1000	300, 400, 600, 800, 1000	1.0MPa	0.1MPa	0.003µm

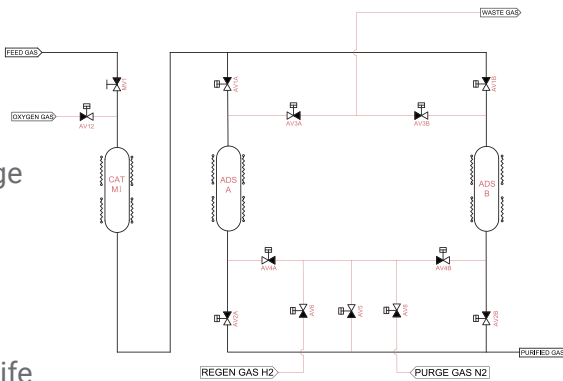
* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

9NS-CM SERIES

The 9NS-CM series eliminates H₂O, O₂, CO, CH₄, and H₂ to <1 ppb through a dual-mode process of high-temperature catalysis and ambient adsorption. The gas path configuration includes a primary high-temperature reactor and secondary ambient catalytic units, with integrated valves and heat exchangers. Smart PLC controls ensure precision operation.

Product Features

- ✔ Methane purification in carbon dioxide streams
- ✔ 316L stainless steel electro-polished purification chamber
- ✔ Non-regenerative front stage with in-situ regenerative rear stage
- ✔ Uninterrupted automated operation with continuous output
- ✔ Robust and fail-safe system architecture
- ✔ Customized high-performance heaters with extended service life
- ✔ Safety-certified system design



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
CM	CO ₂	H ₂ O, O ₂ , CO, H ₂ , CH ₄	< 1ppb
		Condensable Organics	< 10ppt
		Non-Condensable Organics	< 10ppt
		Volatile Acids(as SO ₂)	< 5ppt
		Volatile Bases(as NH ₃)	< 500ppt
		Refractory Compounds(as HMDSO)	< 5ppt

* Purity of inlet gas is no less than 99.995%

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NS010 - 9NS200	10, 20, 30, 40 60, 100, 150, 200	1.0MPa	0.1MPa	0.003µm
9NS300 - 9NS1000	300, 400 600, 800, 1000	1.0MPa	0.1MPa	0.003µm

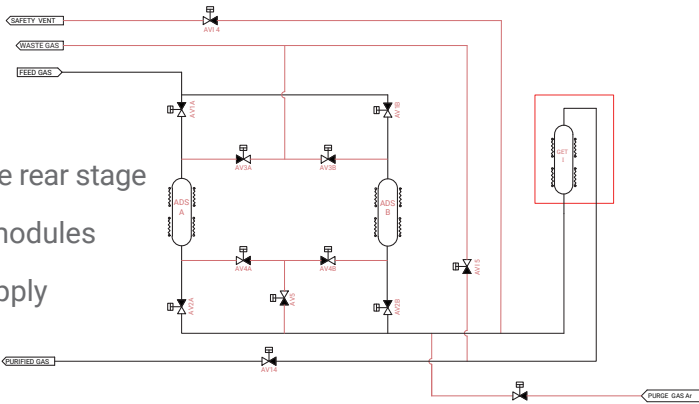
* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

9NSG SERIES

The 9NSG series combines ambient adsorption and high-temperature Getter technology to remove impurities such as H₂O, O₂, CO, CO₂, NMHC, CH₄, and N₂ from process gases to below 1 ppb. The gas path architecture integrates two parallel catalytic purification units connected in series with a high-temperature Getter module, along with precision valves, piping, and heat dissipation systems. The PLC-based control system, equipped with temperature controllers and a touchscreen interface, manages purification cycles, regeneration processes, and safety protocols to ensure continuous and stable operation.

Product Features

- Capable of removing nitrogen and methane from argon/hydrogen mixtures
- Front-stage in-situ regeneration with non-regenerable rear stage
- Extended service life for high-temperature Getter modules
- Fully automated operation with continuous gas supply
- Safety-certified system design
- Optional explosion-proof (ATEX) certification
- Globally certified valves, fittings, and electrical components
- Custom-engineered heaters with extended operational lifespan



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
H	H ₂	H ₂ O, O ₂ , CO, CO ₂ , N ₂ , NMHC, CH ₄ **	< 1ppb
R	Ar	H ₂ O, O ₂ , CO, CO ₂ , N ₂ , NMHC, CH ₄ , H ₂	< 1ppb

* Purity of inlet gas is no less than 99.999%.

** CH₄ removal (optional)

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NSG010 - 9NSG300	10, 20, 30, 40 60, 100, 150, 200, 300	1.0MPa	0.1MPa	0.003µm

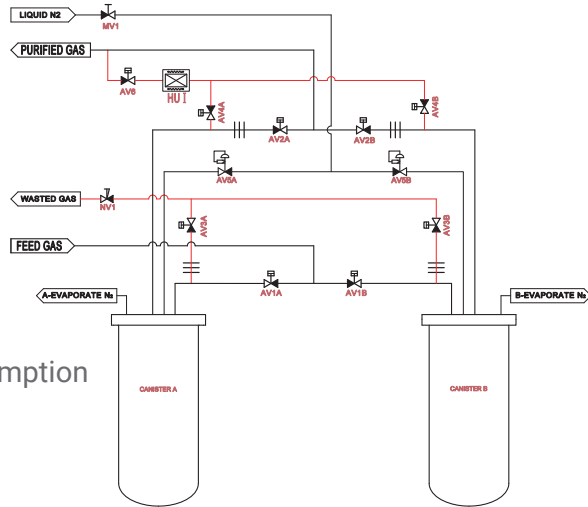
* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.

9NCS SERIES

The 9NCS series employs physical adsorption at low temperatures to remove impurities including H₂O, O₂, CO, CO₂, NMHC, CH₄, N₂, and Ar from gas streams to below 1 ppb. The gas path configuration consists of two parallel adsorbent purification units, integrated with precision valves, piping components, and heat dissipation systems. The PLC-based control system, equipped with temperature controllers and a touchscreen interface, manages purification cycles, regeneration processes, and safety protocols to ensure continuous and stable operation.

Product Features

- Capable of removing nitrogen, argon, and methane from hydrogen streams
- 316L stainless steel electro-polished purification vessel
- Utilizes liquid nitrogen during operation
- Standard explosion-proof (ATEX) certification
- Fully automated operation with continuous gas supply
- High-efficiency heat exchange design with low energy consumption
- Safety-certified system design
- Globally certified valves, fittings, and electrical components
- Custom-engineered heaters with extended operational lifespan
- Multi-module design with automatic in-situ regeneration upon saturation



Purification Specification

Gas Type	Purified Gases*	Impurities	Outlet Impurity Level
H	H ₂	H ₂ O, O ₂ , CO, CO ₂ , NMHC, CH ₄ , N ₂ , Ar	< 1ppb

* Purity of inlet gas is no less than 99.999%.

General Specifications

Model	Nominal Flow Rate* (Nm³/h)	Max. Pressure* (MPa)	Max. Pressure Drop* (MPa)	Outlet Particle Filter* (µm)
9NCS030 - 9NCS1000	30, 60, 100, 120, 150 200, 300, 400, 600, 800, 1000	1.0MPa	0.1MPa	0.003µm

* The table only lists Nominal flow rates, indicators, and configurations. Contact SimPure customer service for more specifications.