

saes®  
getters

## HIGHLIGHTS

### General Features

- Designed for UHP applications
- Heated zirconium getter alloy
- Removal of nitrogen and methane
- Flow rates up to 5 slpm
- Simple design and operation
- Isolation valves
- Controller safety

### Gas Purified

- Argon, helium and other rare gases
- Nitrogen

### Purity Performance

- O<sub>2</sub>, H<sub>2</sub>O, CO, CO<sub>2</sub>, H<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub> removal
- Particle removal

### Applications

- Analytical zero and carrier gas
- R&D laboratory
- Weld gas purification
- Drydown purge for piping systems
- Photolithography
- Silicon epitaxy
- Implant
- Optical fiber manufacturing
- Radiation detector tubes
- H<sub>2</sub>/He FID fuel
- Stored gas for satellites

*We support your innovation*

# MONO TORR® PS3 Series

## Getter for UHP Performance

The PS3 MonoTorr series is designed to remove impurities to below 1 ppb in rare gases and nitrogen at flow rates up to 5 slpm.

SAES patented getter technology allows irreversible chemical absorption of impurities to sub-ppb levels. The getter technology also has the highest capacity to absorb impurities compared to other purification technologies, thereby giving outstanding purifier lifetimes.

The heated getter technology is unique in that it allows the removal of nitrogen (rare gas model), hydrogen and THC including methane.

The PS3 MonoTorr is designed for easy and safe operation.

Like all SAES Pure Gas purifiers, the PS3 MonoTorr is engineered for simplified installation, maintenance-free operation and has the backing of over 60 years of expertise in getter technologies by the SAES Getters Group.



PS3 MonoTorr

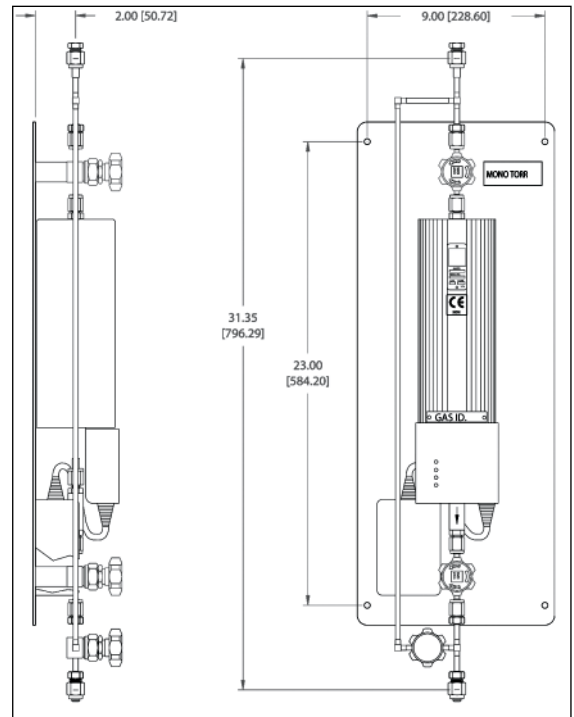
## Purity Performance

PS3 MonoTorr		
0-5 slpm		
Impurity	Rare gases	Nitrogen
O <sub>2</sub>	< 1 ppb	< 1 ppb
H <sub>2</sub> O	< 1 ppb	< 1 ppb
CO	< 1 ppb	< 1 ppb
CO <sub>2</sub>	< 1 ppb	< 1 ppb
H <sub>2</sub>	< 1 ppb	< 1 ppb
CH <sub>4</sub>	< 1 ppb	< 1 ppb
N <sub>2</sub>	< 1 ppb	N/A

## System Feature and Specification Matrix

PS3 MonoTorr	
Additional specifications and features	Rare gases - Nitrogen
Operating temperature (°C)	350-400
Max pressure rating (bar)	10.3 (150 psig)
Heater power consumption (Nominal/Maximum) - (W)	<50/<260
Voltage (VAC)	110-120 or 220-240
0.003 µm metal filter	Standard
Typical inlet gas quality	99.995%
1/4" SS diaphragm valves	Standard
10 µinch Ra surface finish	Standard
1/4" VCR fittings	Standard
Bypass assembly	Optional

Lifetime depends on actual inlet gas quality and flow rate. For custom applications and gases please contact us.



PS3 MonoTorr with optional bypass front and side views. Size given in inches and [millimetres].

The optional bypass assembly allows the isolation of the cartridge while maintaining source gas flow.

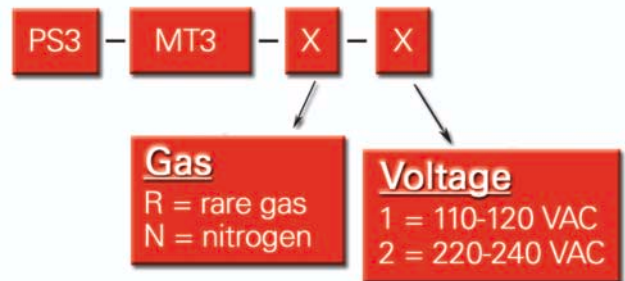
- Lainate (Italy)
- Avezzano (Italy)
- Köln (Germany)
- Moscow (Russia)
- Paris (France)
- Daventry (UK)
- Nanjing (China)
- Shanghai (China)
- Tokyo (Japan)
- Seoul (Korea)
- Jincheon-kun (Korea)
- Singapore
- Hsin Chu (Taiwan)
- Cleveland OH (USA)
- Colorado Springs CO (USA)
- San Luis Obispo CA (USA)
- Sparks MD (USA)

## Ordering Information

### Options

BYPS-3 = Bypass assembly

PS3-APIMS = APIMS certification to 1 ppb



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ISO 9001

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