



AIR GAS ELECTRONIC MATERIALS ENTERPRISE CO. LTD



## GAS PURIFICATION SYSTEMS

# GAS PURIFIERS



## Nitrogen Gas Purifiers :



- SEMI-S2 compliant
- PLC based control with touch-screen interface for reliable operation & safety with alarm log records for pressure, flow, temperature & status valve with COM port
- Patented catalyst filler to ensure high efficiency of purifier
- High stability of operating pressure
- Regeneration process of purifier can be resume after interruption
- Electrical and instrumental components can be replaced without interruption of purifier operation
- All metal cabinet with doors
- Hydrogen blending station
- Graphical display of on-going process on HMI

## Technical Specifications :

- Gas Purified : Nitrogen
- Impurities Removed : H<sub>2</sub>O, O<sub>2</sub>, CO, CO<sub>2</sub>, H<sub>2</sub>, THC
- Flow Rates : 10 - 3000 Nm<sup>3</sup>/hr \*\*
- Max. Pressure Drop : 0.5 bar
- Max Particle count : < 0.003 micro-meter
- Hardware interlock for high temperatures
- Electric gas preheaters

\*\* For higher flow purifiers, contact AGEM sales office

# GAS PURIFIERS



## Technical Specifications :

Type	Nitrogen Purifier		Model No. PG-R-SN <sub>2</sub>		
Parameter	Input	Output	Remarks		
Gas	Flow (Nm <sup>3</sup> /hr)	300	300	10 – 3000 Nm <sup>3</sup> /hr	
	Pressure (MPa)	1.0	> 0.95	ΔP < 0.05	
	Temperature (°C)				
	Purity (in ppb)	5N	9N		
	O <sub>2</sub>	≤ 3000	≤ 1		
	CO	≤ 1000	≤ 1		
	CO <sub>2</sub>	≤ 1000	≤ 1		
	H <sub>2</sub>	≤ 1000	≤ 1		
	H <sub>2</sub> O	≤ 3000	≤ 1		
	THC	≤ 1000	≤ 1		
Particle	---	≤ 0.003 μm			
Operation	Operating Mode	Intelligent auto-operation			
	Switching Cycle	~ 240 hr			
	Regeneration time	Adsorption Tower every 5 – 15 days			
	Regen Gas	Hydrogen (5N) , 0.5 – 0.7 Mpa			
	Voltage	380 VAC			
	Power Consumption	Purifier: 380 VAC, 3 Phase Control PLC: 220 VAC, Single Phase			
	Cooling Water	Yes			
Equipment Size	L*W*H (mm) : 2200*2000*2400 (for 300 Nm <sup>3</sup> /hr)				
Equipment Weight	~ 3300 Kg				
End Connections	Gas Inlet	2" Welded	Gas Outlet	2" Welded	
	Analytical Port	1/4" MVCR	Pneumatic	1/4" LOK	
	Vent Outlet	1/2" LOK	Vent Outlet	1/2" LOK	

## Enclosed Documents :

- Installation Drawings
- Mechanical & Electrical Drawings
- Operation & Installation Manual
- Spares Manual
- Quality Documentation (Calibration, Testing Certificates etc.)



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