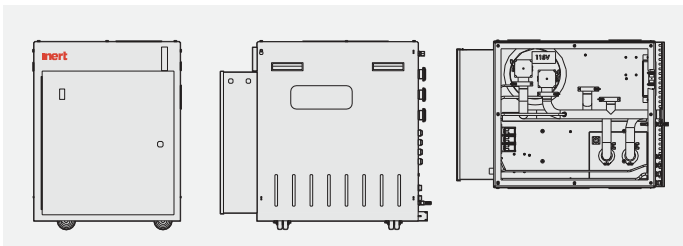




Inert manufactures a complete line of Nitrogen Management Systems designed to integrate with various sized enclosures and processes. Our Gas Management Systems are the centerpiece of all our gloveboxes and enable our customers to achieve a <math><1\text{ppm}</math>  $\text{O}_2$  and  $\text{H}_2\text{O}$  working environment.

### Nitrogen-1

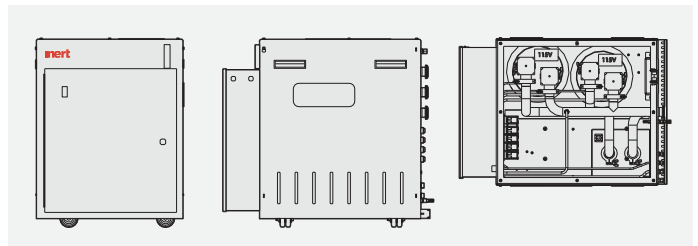


**External Dimensions:**  
660 mm W x 914 mm D x 813 mm H

**SR Models:** Large capacity solvent vapor removal system.  
Contents: 7.5kg activated carbon.

**RSR Models:** Regenerable large capacity solvent vapor removal system.  
Contents: 9.5kg molecular sieve.

### Nitrogen-2

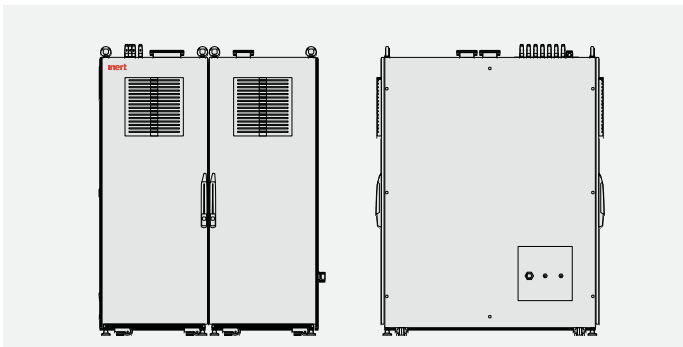


**External Dimensions:**  
660 mm W x 914 mm D x 813 mm H

**SR Models:** Large capacity solvent vapor removal system.  
Contents: 7.5kg activated carbon.

**RSR Models:** Regenerable large capacity solvent vapor removal system.  
Contents: 9.5kg molecular sieve.

### Nitrogen-10

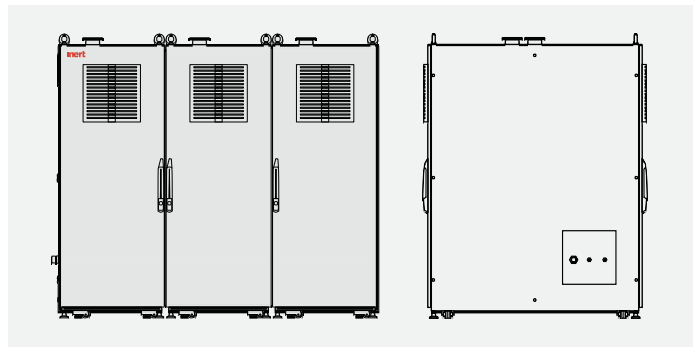


**External Dimensions:**  
1219 mm W x 1270 mm D x 1575 mm H

**SR Models:** Large capacity solvent vapor removal system.

**RSR Models:** Regenerable large capacity solvent vapor removal system.

### Nitrogen-20



**External Dimensions:**  
1854 mm W x 1270 mm D x 1575 mm H

**SR Models:** Large capacity solvent vapor removal system.

**RSR Models:** Regenerable large capacity solvent vapor removal system.

# SPECIFICATIONS

## Casters for mobility

### <1ppm O<sub>2</sub> and <1ppm H<sub>2</sub>O purity level

When connected to a glovebox system that has a leak rate of <0.05 vol%/h

#### Nitrogen-1 and -2- All Permutations:

O<sub>2</sub> capacity = 43 L

H<sub>2</sub>O capacity + 1800 g

#### Nitrogen-10 and -20:

O<sub>2</sub> capacity – 217 L per Purifier Column

H<sub>2</sub>O capacity = 9000 g Purifier Column

**Automated purifier column valves:** Interlocked with the blower.

Blower will not run if the valves fail to open

### Variable speed circulation blower:

**Nitrogen-1 and -2 – All Permutations:** 120 cfm max flow rate blower

**Nitrogen -10 and -20 –All Permutations:** 185 cfm max flow rate blower

### Max flow rate through purifier column:

**Nitrogen-1 and -2 All Permutations:** 60 cfm (101 m<sup>3</sup>/h)

**Nitrogen -10 and -20 – All Permutations:** (315 m<sup>3</sup>/h)

### Siemens SIMATIC S7-1200 PLC control system

### Siemens KTP800 7” (177.8 mm) color touch screen HMI

**Trending Screen:** Pressure, O<sub>2</sub> and H<sub>2</sub>O Value is logged for 24 hours

**Automatic pressure control:** (+/- 15 mbar)

**Manual pressure control:** Footswitch (not an Argon-10/20)

### Fully automatic regeneration sequence

**Purge valve:** O<sub>2</sub> level, Timer or manually controlled

**Vacuum pump:** 10 cfm (17 m<sup>3</sup>/h) rotary vane pump with oil mist eliminator & oil return kit

### Integrated oxygen and moisture analyzers (sold separately):

Range 0-1000 ppm

Zirconia O<sub>2</sub> analyzer as standard or electrochemical sensor for solvent compatibility

### Eco Mode Features

**Vacuum pump timer:** Shuts pump off for energy reduction

**Automated Blower speed control:** O<sub>2</sub> level adjusts blower speed

### Approvals:



## OPTIONS

- 0-1000ppm Zirconia Oxygen Analyzer (not for use with solvents)
- 0-1000ppm Electrochemical Oxygen Analyzer (solvent compatible)
- 0-25% Zirconia Oxygen Analyzer
- 0-1000ppm Moisture Analyzer
- 0-25% Helium in Nitrogen Analyzer
- Solvent Sensor
- Heat exchanger located in the circulation loop. 1000 W cooling capacity with 18 lpm flow rate of cooling water
- Dry scroll pump
- Solvent removal system

## SYSTEM APPLICATIONS

- Additive (3D) Manufacturing
- Aerospace
- Automotive
- Chemistry
- Lamp Manufacturing
- Lithium Ion Battery
- Medical Device
- Nuclear
- OLED
- Pharmaceutical
- Semiconductor
- Solar
- Specialty Chemical
- Thin Film
- Many other applications