



# Nanoturion™ N4-A

## Fully Automatic Valve Manifold Box



SEMI-GAS® supplies SEMI S2 certified, production-ready ultra high purity gas source systems, distribution systems and control technology to leaders in the Semiconductor industry and related high-tech fields. Built to address the most rigorous precision and purity demands of these specialized applications, SEMI-GAS® solutions are globally renowned for their premier levels of safety, quality, and performance.

### DESIGN STANDARDS

- ◆ Conforms to SEMI S2 Standards
- ◆ UL Labeled
- ◆ Conforms to Uniform Building and Fire Codes
- ◆ Upholds Sample Validation Testing Standards
- ◆ Helium Leak Tested to  $1 \times 10^{-9}$  atm-cm<sup>3</sup>/sec
- ◆ Equipped with GigaGuard™ GSM Controller

### FEATURES

- ◆ Safely Distributes Hazardous Process Gases
- ◆ Performs Purging Automatically
- ◆ Includes Fully Loaded Stick Design
- ◆ Includes Ergonomically Positioned Color Touch Screen
- ◆ Maintains Detailed Alarm Logs
- ◆ Multiple Communications Protocols Available
- ◆ Intuitive Operating Interface and Control
- ◆ Continuously Monitors System Conditions for Alarms
- ◆ Stick Status Indicator Lights
- ◆ Rail Mounted Stick Design for Easy Maintenance and Expansion
- ◆ 4, 6 and 8 Stick Enclosures Available
- ◆ Various Stick Designs Available

### ENGINEERING DATA

- ◆ 4 Stick System Dimensions: 44" T X 22" W X 15" D (pictured)
- ◆ Exhaust Duct: 4" Diameter
- ◆ Voltage: 110 to 240 VAC, 1 Phase
- ◆ Frequency: 50 to 60 Hz

### MATERIALS OF CONSTRUCTION

- ◆ Welded 11 Ga Steel Enclosure
- ◆ Self-Closing and Self-Latching Door
- ◆ UL Approved Fire Sprinkler
- ◆ 1/4" Thick Safety Glass Window
- ◆ Integrated Wall or Rack Mount Attachment Points
- ◆ Ultra High Purity Fluid Components



### ORDERING INFORMATION

Contact your SEMI-GAS® sales rep or visit [www.semi-gas.com](http://www.semi-gas.com)

### BY APPLIED ENERGY SYSTEMS

180 Quaker Lane  
Malvern, PA 19355

Phone: 610.647.8744

Fax: 610.640.4548

Email: [sales@semi-gas.com](mailto:sales@semi-gas.com)

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### SAFETY FEATURES

- ◆ **Coaxial Tubing** for toxic and hazardous gas applications (optional)
- ◆ **Door Switch Monitor** for applications that require extra security and/or limited access (optional)
- ◆ **UV/IR Detector** for pyrophoric gas applications including silane and silane mixtures greater than 1.37% (required for silane)
- ◆ **Rate of Rise Heat Detector** for flammable gas applications (optional)
- ◆ **Hazardous Gas Detector** for all hazardous, toxic, and/or flammable gas applications (required for silane, consult local codes for all other gases)
- ◆ **Controller Z-Purge Kit** for systems installed in Class 1 Division 2 hazardous locations, as well as applications for silane and silane mixtures greater than 1.37% (required for silane)

### ORDERING INFORMATION

Example: Fully Automatic 4-Line Valve Manifold Box with 4 Sticks Populated



#### Product

**N** = Nanoturion™ Distribution System

#### Configuration

**4** = 4-Line Panel (1-4 sticks)  
**6** = 6-Line Panel (1-6 sticks)  
**8** = 8-Line Panel (1-8 sticks)

#### Control

**M** = Manual  
**S** = Semi Automatic  
**A** = Fully Automatic

#### Sticks Populated

**0** = 0 Sticks  
**1** = 1 Sticks  
**2** = 2 Sticks  
**3** = 3 Sticks  
**4** = 4 Sticks  
**5** = 5 Sticks  
**6** = 6 Sticks  
**7** = 7 Sticks  
**8** = 8 Sticks

#### Enclosure

**E** = Enclosure  
**O** = No Enclosure



\*All Nanoturion™ Distribution Systems can be customized to meet unique specifications. Contact your SEMI-GAS® sales rep for details.