

# Nanoturion<sup>™</sup> N4-S

## Semi 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 1x10<sup>-9</sup> atm-cm<sup>3</sup>/sec
- ◆ Equipped with GigaGuard<sup>™</sup> GSM Controller

#### **FEATURES**

- Safely Distributes Hazardous Process Gases
- Rail Mounted Stick Design for Easy Maintenance and Expansion
- Automatic Shutdown in the Event of an Alarm Trip
- Includes Line Isolation and Pressure Regulation for Individual Process Sticks
- Gauge Based Pressure Monitoring
- ♦ LED Lights Provide Constant System Status
- ♦ Intuitive Operating Interface and Control
- Continuously Monitors System Conditions for Alarms
- 4, 6 and 8 Stick Enclosures Available
- ♦ Emergency Shut Off (ESO) Valve on Each Stick

#### **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





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#### **SAFETY FEATURES**

- Door Switch Monitor for applications that require extra security and/or limited access (optional)
- Hazardous Gas Detector for all hazardous, toxic, and/or flammable gas applications (required for silane, consult local codes for all other gases)
- Rate of Rise Heat Detector for flammable gas applications (optional)
- 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: Semi Automatic 4-Line Valve Manifold Box with 3 Sticks Populated



Product



Configuration









Control

Sticks Populated

Enclosure

#### **Product**

 $\mathbf{N}$  = Nanoturion<sup>TM</sup> 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



<sup>\*</sup>All Nanoturion™ Distribution Systems can be customized to meet unique specifications.

Contact your SEMI-GAS® sales rep for details.