Airgas CryoWiz

The Airgas 577 series CryoWiz™ delivers a continuous supply of liquid nitrogen from a primary and secondary source automatically with no temperature change. The CryoWiz uses a proprietary algorithm and precise pressure and temperature sensors to monitor the demand for and supply of the liquid nitrogen. With a unique insulated switching mechanism, high flow pneumatic valves, and hot gas bypass programming, the CryoWiz automatically switches sources with virtually no change in delivered cryogenic temperature. Ensuring both consistent temperature and continuous supply, the CryoWiz is ideal for critical cryogenic applications such as cryopreservation and environmental chambers.

<table>
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<tr>
<th>Design Features</th>
<th>Materials</th>
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</table>
| • Automatic Proprietary Control Algorithm | Enclosure  
Ensures continuous efficient supply |
| • Insulated Switching Mechanism | Internals  
Minimizes flow loss of liquid |
| • High Flow Pneumatic Control Valves | Cryogenic Relief Valves  
Supplies multiple freezers |
| • Hot Gas Bypass | Hot Gas Bypass  
Eliminates flow loss |
| • Single Compact NEMA 12 Enclosure | Maximum Inlet Pressure  
Occupies less space easy to install |
| | Inlet Connection  
Oxygen Deficiency Relay Contact  
Ensures OSHA safe use |
| • Remote Monitoring | Outlet Connection  
Local Audible and Visual Alarm  
On-board emergency monitoring |
| • Oxygen Deficiency Relay Contact | Drain  
Optional Remote Alarm  
USB and Ethernet communication  
24,000 event date and time log |
| • Local Audible and Visual Alarm | Enclosure  
Powder coated NEMA 12 |
| • Optional Remote Alarm | Internals  
Brass bar stock |
| | Cryogenic Relief Valves  
50 PSIG (3.5 BAR) optional  
1/2” FPT |
| | Hot Gas Bypass  
1/2” FPT |
| | Maximum Inlet Pressure  
35 PSIG (2.4 BAR) optional |
| | Inlet Connection  
1/2” FPT |
| | Outlet Connection  
1/2” FPT |
| | Drain  
1/2” PVC |

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<tr>
<th>Specifications</th>
<th>Alarm Output</th>
<th>1 or 5 dry contact NC</th>
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<tbody>
<tr>
<td>Alarm Inputs</td>
<td>Oxygen deficiency relay</td>
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</tbody>
</table>
| Dry Nitrogen (Gaseous)* | 105 PSIG (7 BAR) max  
95 PSIG (6 BAR) min  
Inlet: 1/8" FNPT  
* Required for pneumatics |
| Communication Ports | USB (maintenance only)  
Ethernet (optional) |
| Power | 90-264 VAC, 47-63 Hz (US, UK, European, Australian, and Chinese adapters included) |
| Weight | 40 lbs (18 kg) |

Airgas Quality Policy
The purpose of the Airgas Quality System is to continually improve our manufacturing and related processes to provide our customers with the highest product purity, consistency, and service.
## 577 Series CryoWiz™

- **Oxygen Deficiency Monitor** Input
- **Remote Alarm Output**
- **USB Connection**
- **Ethernet Connection**
- **Power Cord**
- **Purge Gas Pipe-Away**
- **System Relief Valve Pipe-Away**
- **Dry Nitrogen Supply, 95–105 PSI (6.6–7.5 BAR)**
- **Cryogenic Hose, Typical Both Inlets and Outlet**
- **Liquid Nitrogen Outlet to Freezer**
- **Diameter 1/2” PVC Water Drain**
- **Liquid Nitrogen Cylinder**
- **Cryogenic Freezer**

## Ordering Information

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Description</th>
<th>Material</th>
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<tbody>
<tr>
<td>Y11-CPS77N2</td>
<td>1 x 1 Liquid Nitrogen Manifold</td>
<td>Brass</td>
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<tr>
<td>Y40-DEFALARM</td>
<td>Oxygen Deficiency Alarm 110 VAC</td>
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</tbody>
</table>

For additional hoses, configurations, options and technical support please call 1-800-939-5711

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