

GASGUARD® AP Controllers

The GASGUARD® AP controller family provides a clear distinction of Air Products as the premier supplier of specialty gas delivery systems to the electronics industry. The controller design is the culmination of feedback from both customers and the MEGASYS total chemical management team, focusing experience and maintainability input gathered from hundreds of millions of operational service hours around the world. The GASGUARD AP controller family enables extremely high system reliability and reduced cost of ownership, deploying a modular core to minimize spare parts inventory while simplifying maintenance. GASGUARD AP controllers also feature several configurable options including multiple types of display, I/O modules, and communication capabilities.

Introducing the GASGUARD AP2 Controller

The GASGUARD AP2 controller combines the core hardware and software design first introduced with the AP3 controller with an economical LCD text display. The 8-line by

40-character LCD displays all system analog information providing operator guidance through text messaging for alarms and procedural interaction. A system-specific flow schematic diagram complements valve indicator LEDs, providing direct process valve status information during operation. True to the modular design approach, the GASGUARD AP2 controller offers operational versatility and expandability in a value added configuration.



GASGUARD controllers, such as the AP2, are available with CE Nationally Recognized and Testing Laboratory (NRTL) compliance.



GASGUARD AP Controllers

The GASGUARD AP controller design incorporates maintainability and operability features:

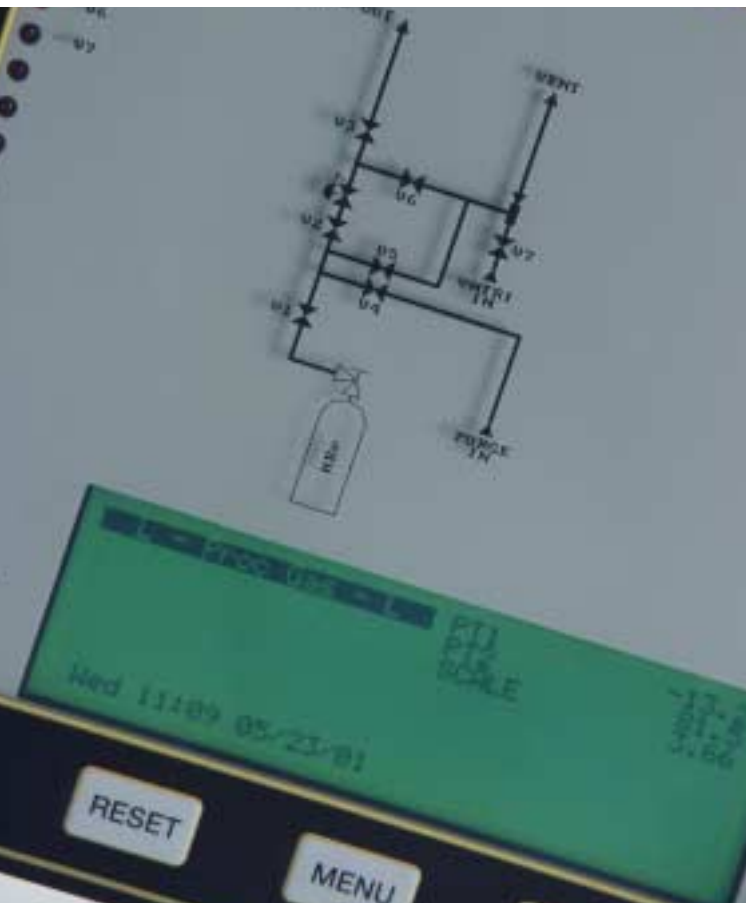
- Large display screen for flow schematic
- Enhanced menu movement through shift key control
- Ergonomic key distribution and placement, including key colors that allow better visibility for low light areas
- Dual half-turn fasteners to secure the door closed and seal the enclosure for z-purge applications
- Locking door prop for internal maintenance, and resistive hinges for impact protection safety while closing

GASGUARD AP controllers also feature highly functional electrical details such as:

- DIN rail mounted customer I/O terminal blocks
- Protection for high power transients and power surges
- Protection for Electro-Magnetic and Radio Frequency immunity (EMI/RFI)
- RJ-45 connectors for network communication wiring
- Laptop interface to upload and download software configuration files

Internally, the GASGUARD AP controllers feature a modular component design layout. A central facet of the design is the movable electronic card cage:

- Cage swings out for easy access to all electrical connections and fuses. A built-in fuse tester speeds maintenance work
- Allows I/O expansion of digital and analog signals through addition of expansion cards
- Secures cards with captive fastener hinged retainer, requiring no tools for part addition or replacement



The AP2 controller graphics are custom tailored to the specific system configuration.



GASGUARD systems are functionally tested and verified prior to shipment.

Controller Display Choices

GASGUARD AP2 Display

- 8 line by 40 character text LCD display
- Static, inserted flow graphic with LED valve indicators
- Text based fault and shutdown alarms

GASGUARD AP3 Display

- 10.4" color, 10.4" high-contrast electro lumicant (EL), or 9.4" monochrome display
 - Dynamic, real time graphics
 - Pop-up window for all fault and shutdown alarms
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Standard Features

- Simplified 22 key operator keypad
 - Configurable software
 - Pneumatic solenoids
 - Expandable Input/Output
 - Analog inputs with 16-bit resolution
 - Four levels of security access
 - Time-st. alarms
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Common Options

- Enclosure inert gas blanket (z-purge)
 - NEC Class 1, Division 2 locations
 - Network communication
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GASGUARD AP3 delivery systems provide dynamic, real-time graphics.

For More Information

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