



GigaGuard™ GG-ESS

Emergency Shutdown System



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
- ◆ Intuitive Operator Control
- ◆ Programmable Inputs

FEATURES

- ◆ Safely Interrupts Gas Flow During Undesirable System Conditions
- ◆ For Use with Semi Automatic Centurion™, Decaturion™, and Nanoturion™ Gas Systems
- ◆ Monitors Up to 11 Optically Isolated Inputs
- ◆ Various LEDs Provide Constant System Status
- ◆ A Purge Key Disables Specific Sensors During System Purging
- ◆ All Programmable Inputs are Customizable by Application
- ◆ Continuously Monitors System Conditions for Alarms
- ◆ Internal Buzzer Sounds During Any Alarm Condition
- ◆ Remote Control Boxes for System Status and Remote Shutdown are Available
- ◆ A Dual Version of the ESS is Available for Two Cylinder Control and Switchover Capabilities

ENGINEERING DATA

- ◆ Dimensions: 5" T X 8" W X 6" D
- ◆ Weight: 3.5 lbs
- ◆ Voltage: (User Selectable) 100 to 124 VAC or 200 to 250 VAC
- ◆ Pneumatic: 80 to 100 psi
- ◆ Design: CMOS Microprocessor Based Systems

MATERIALS OF CONSTRUCTION

- ◆ Welded 11 Ga Steel Enclosure
- ◆ LED Indicators Lights
- ◆ 8 Bit Microprocessor
- ◆ Phoenix Terminal Connector Strips
- ◆ Barb Fittings for Pneumatics
- ◆ 8/32 Threaded Captive Fasteners for Mounting
- ◆ Soft Membrane Front Panel



ORDERING INFORMATION

Contact your SEMI-GAS® sales rep or visit 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

GIGAGUARD-GG-ESS-082016-V1

SAFETY FEATURES

- ◆ **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)
- ◆ **Shutboy Software Upgrade** to accommodate Shutboy valve shutters for automatically closing the gas cylinder valve during emergency situations (optional)



ORDERING INFORMATION

Example: Dual Channel Emergency Shutdown System with Z-Purge



Product

GG = GigaGuard™ Controller

Series

ESS = Emergency Shutdown System

Operation

S = Single Channel
D = Dual Channel (for Autoswitchover)

Z-Purge

Z = Z-Purge
O = No Z-Purge

*All GigaGuard™ Controllers can be customized to meet unique specifications. Contact your SEMI-GAS® sales rep for details.