



Sixteen Channel Alarm Controller GDA-1600



Bacharach's all new GDA-1600 Controller offers premier performance and functionality in a standalone controller. From one to sixteen channels, the GDA-1600 is designed to provide operators the most detailed, real time information about gas concentrations throughout the facility. Information is relayed to the operator through a large LCD display that shows real time gas concentrations, sensor location, sensor type as well as historical data trends. Each channel has three independent, user-programmable alarm threshold values that allow for flexibility in alarm notification. When alarms do occur, operators are notified via LED alarm indicators on the front panel, clearly showing which channel is in alarm and the alarm state. Internal relays can also be utilized to control fans, horns or beacons when alarm thresholds are exceeded. When responding to alarms, information is critical. The GDA-1600 provides more details than any other controller on the market today.

Centralize Monitor and Alarm Functions

The GDA-1600 is equipped with a fault and three alarm levels per channel with features such as ON/OFF delays, latching relays and alarm acknowledge. A dedicated horn driver circuit for a local audible alarm is also standard. Two standard 5-amp alarm relays are configurable via the "alarm voting" menu to make relays trip based upon various alarm combinations. If more relays are required optional relay boards can be added.

Real-Time clock and calendar are standard on the GDA-1600. Options such as 4-20 mA outputs and discrete relays are easily added. RS-485 (Modbus[®] RTU) or Ethernet (Modbus[®] TCP) ports are also available for flexibility in sending data to PC's, PLC's, DCS's, or other controllers. The GDA-1600 has complete calibration functionality for each input channel. This unique feature allows maintenance and service personnel to use the controller to calibrate the Bacharach GDX-150 simple sensor.



GDA-1600 Features & Benefits:

- Accepts up to 16 inputs, outputs and relays
- Graphic LCD for real time monitoring and 30-minute/24 hour data trends
- Complete calibration functionality for each input channel
- Three independent alarm levels per channel
- Non-volatile memory retains all configuration data

GDA-1600 Specifications

Analog Inputs (Optional):	12 Bit 4-20 mA into 100 ohms Input Impedance; Includes + Power Supply Terminals for Each Channel for Routing Power to 2 or 3 Wire Transmitters, Single Sensor, 30 Foot Diameter
Dimensions:	13.0" x 16.0" x 8.63" (33.02 cm x 40.64 cm x 21.9202 cm)
Housing Options:	NEMA 4X Fiberglass Wall Mount 1/2 Length 19 Inch Rack /Panel Mount NEMA 7 Explosion-Proof Wall Mount (Consult Factory)
User Interface:	128 x 240 Pixel Graphic LCD with Backlight Displays Bar Graphs, Trends and Engineering Units 52 Discrete LED's Indicate Alarm Status for 3 Alarms per 16 Channels and Common Relays 24 Hour Datatrending
Common Alarm Relays:	5-amp 30 VDC or 250 VAC Resistive Form C
Discrete Alarm Relays (Optional):	5-amp 30 VDC or 250 VAC resistive Form C (8 Per Card)
Serial Ports:	Master & Slave RS-485 Half or Full Duplex Ports Equipped with Tx / Rx LED's. Protocol = Modbus® RTU
Analog Outputs (Optional):	10 bit 4-20 mA Output. Max Load 800 ohms with Nominal 24 VDC Power Supply
Ambient Temperature Range:	13° to 140° F (-25° to +60° C)
Power:	10 - 30 VDC (24 VDC Nominal) 12 Watts Max
Approvals:	CSA C22.2 No 1010.1 & 152 for Combustibles & ISA S82.02; UL 1604 / C22.2 No 213 (Div 2 Groups A,B,C,D); EN55011 & EN61000; CE Mark

GDA-1600 Ordering Information

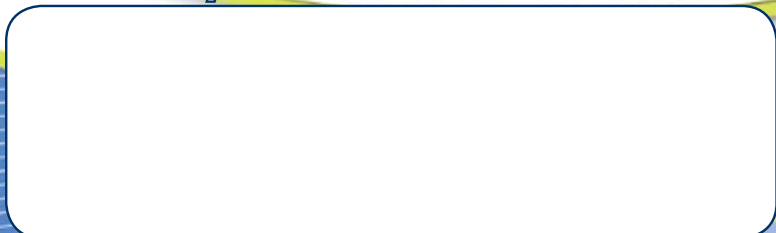
5700-1600	GDA-1600 Base Controller, w/Display, NEMA 4X Enclosure
5700-1601	GDA-1600 Base Controller, w/Display 19 Inch Rack/Panel Mount (with Bezel and Hardware)

All controllers are ordered based on purchasers required options. Each option is a separate part number and can be added to the base controller at any time. When a base controller is ordered with additional accessory options, these options are installed during the time of manufacturing.

GDA-1600 Options

5700-0003	GDA-1600 Auxiliary Common Relay for Alarm 1,2 and Horn
5700-0004	GDA-1600 4-20 mA Input Card, 8 Channel
5700-0011	GDA-1600 Bridge Sensor Input Card, 8 Channel
5700-0012	GDA-1600 Alarm Relay Output Card, 8 Channel
5700-0005	GDA-1600 4-20 mA Output Card, 8 Channel
5700-0006	GDA-1600 Resistive 4-20 mA Input Card, 8 Channel
5700-0008	NEMA 4X Expanded Enclosure (Required for 8 Modules or More)
5700-0009	Expansion Back Plane (Required for 5700-0008 Enclosure)
5700-0030	120 Watt Power Supply (Needed if 24 VDC Required Exceeds 10 Watts)
5700-0022	6 foot I/O PCB Ribbon Cable
5700-0023	10 inch I/O PCB Ribbon Cable
5700-0021	6 inch I/O I2C Cable

Distributed By:



 **MADE IN THE USA**

Bacharach is a registered trademark of Bacharach, Inc.
©Product Bulletin 5005 2010, Bacharach, Inc., all rights reserved. All information is subject to verification.
September 2010 - REV. 0 Printed in U.S.A.



ISO 9001:2008