



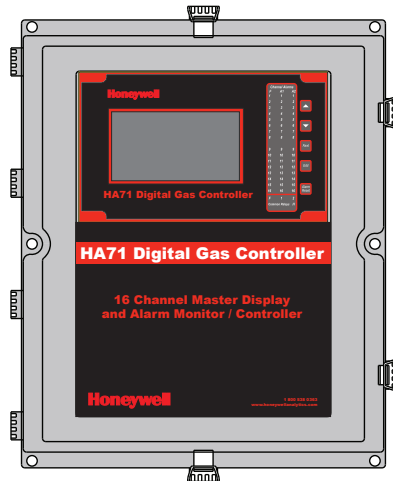
**16 Channel Master Display and Monitor / Controller**

# HA71 16 CHANNEL DIGITAL GAS CONTROLLER

## Features:

- Accepts up to 16 inputs from many sensor types and signal ranges. Inputs may be analog, or Modbus® Master capability allows input data to be retrieved via RS-485 data highway reducing wiring costs at installation
- 8 channel display mode and option boards allow economical configuration of systems requiring only 8 channels or less
- Dual Modbus RS-485 serial ports for simultaneous master / slave operation. Optional phone modem
- 3 independent alarm levels per channel. Relay Acknowledge feature allows silencing of external audible devices during existing alarm conditions
- Graphic LCD readout displays monitored data as trends, bar graphs and engineering units. Alarm LED's flash when new and become steady after acknowledged
- Standard A SPDT common alarm relays for HORN, HIGH, WARN & FAULT. Optional discrete channel alarm relays also available
- Options such as alarm event printer interface, direct sensor inputs, 4-20mA outputs, discrete alarm relays and others are supported via an I<sup>2</sup>C expansion bus
- Cal Mode offers pushbutton zero / span calibration for direct sensor interface applications. Authorization Mode allows locking of critical configuration variables
- Magnetic keypad available for non-intrusive operation in potentially hazardous locations
- NEMA 4X, Explosion-Proof, surface mount, panel and rack mount packaging options available

The Honeywell Analytics HA71 16 Channel Digital Gas Controller is designed to provide simultaneous display and alarm functions for up to 16 input variables. A graphic LCD displays monitored data as trends, bar graphs and engineering units. Three adjustable alarm levels are provided per channel. Relay outputs allow control of beacons horns and other alarm events. A horn relay may be set for steady or pulsing operation.



Analog inputs may be accepted and conditioned via sensor specific analog input cards. Alternatively, the standard Modbus Master port allows input data to be retrieved from Modbus slave devices including the many Modbus compatible Honeywell Analytics sensor transmitter products.

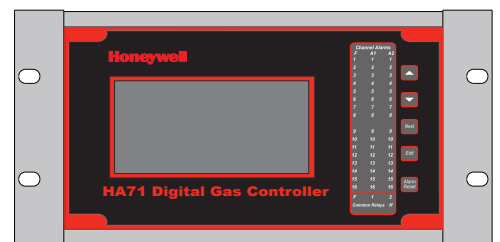
The HA71 is easy to configure and user friendly. Measurement ranges in engineering units, adjustable alarm set-points, dual serial interfaces and many other features combine to allow the HA71 satisfy the needs of many demanding

applications. It is widely used for centralizing the display and alarm processing functions in critical multipoint monitoring applications. These include monitoring of ambient gas detection, rotating machinery, tank levels, flow, temperature and others.

A RS-485 Modbus slave port allows up to 128 HA71's to be multidropped onto a single data highway for interrogation by another Modbus master. HA71's may also be cascaded by connecting one unit's master port to another's slave port.

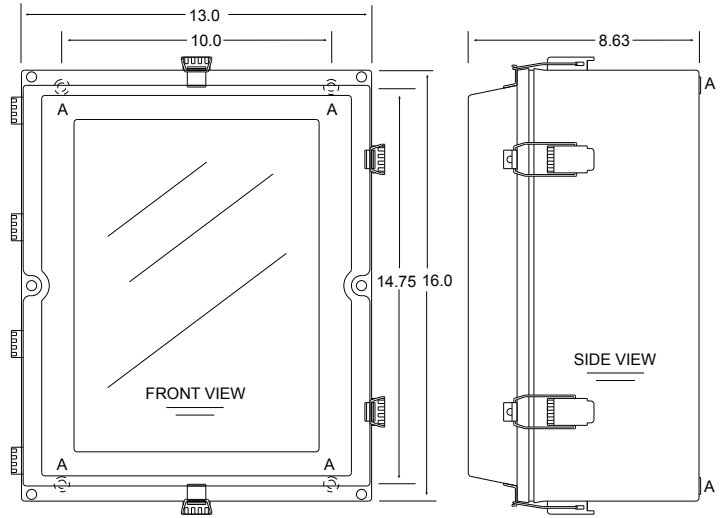
HA71 options such as discrete alarm relays per channel, 4-20mA I/O, direct sensor input conditioning and others are added by connecting appropriate 8 channel boards (2 required for more than 8 channels) to the economical I<sup>2</sup>C expansion bus. Familiar "telephone style" cables and connectors interface to this bus. This method allows versatile system configuration of options satisfying the most unusual user applications.

Nonvolatile memory retains all configuration data indefinitely.



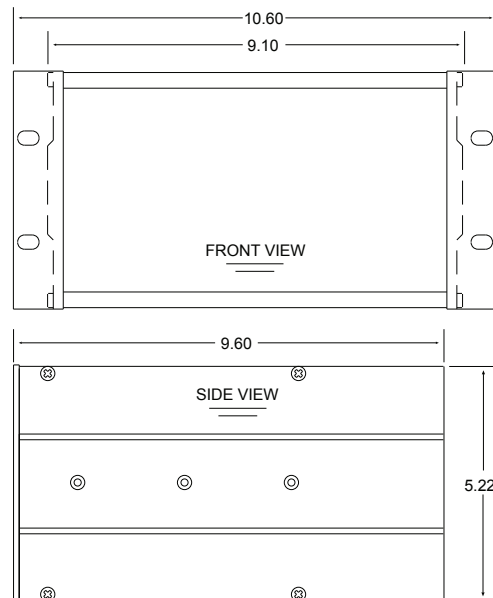
## Specifications:

- **ANALOG INPUTS (OPTIONAL):**  
12 bit 4-20mA into 100 ohms input impedance; includes +power supply terminals for each channel for routing power to 2 or 3 wire transmitters.
- **SERIAL PORTS:**  
Master & Slave RS-485 half or full duplex ports equipped with Tx / Rx LED's. Protocol = Modbus® RTU.
- **COMMON ALARM RELAYS:**  
5 amp 30VDC or 250VAC resistive Form C
- **DISCRETE ALARM RELAYS (OPTIONAL):**  
5 amp 30VDC or 250VAC resistive Form C
- **ANALOG OUTPUTS (OPTIONAL):**  
10 bit 4-20mA output. Max load 800 ohms with nominal 24VDC power supply
- **DISPLAY**  
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
- **AMBIENT TEMPERATURE RANGE:**  
-25 - 60 degrees C.
- **POWER SUPPLY:**  
10 - 30VDC (24VDC 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).
- **HOUSING OPTIONS:**  
NEMA 4X fiberglass wall mount (shown at right)  
1/2 length 19 inch rack / panel mount (shown at right)  
NEMA 7 explosion-proof wall mount (see manual)



Note: 4 'A' mounting holes are .31 dia.

## NEMA 4x Wall Mount



Note: Panel cut-out = 5.25 X 9.20

## RACK / PANEL MOUNT (19" RACK SPREADER PLATES & PANEL MOUNT BEZEL NOT SHOWN)



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