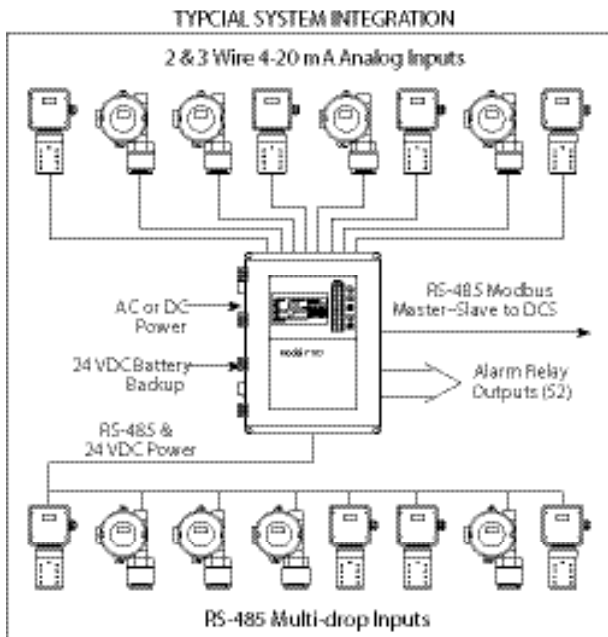


Model 7100 Controller

8 or 16 Channel Gas Detection Controller

- Mix Analog and Digital Inputs
- 8 or 16 Fully Configurable Channels
- RS-485 Modbus Master/Slave I/O
- Common Alarm & Horn Relays Included
- Optional Discrete Alarm Relays
- Advanced, Multi-Mode LCD Graphic Display
- Visual Alarm Annunciation (52), All Channels
- 115/230 VAC, 50/60 Hz or 24 VDC Operation
- NEMA 4X, UL Listed Enclosure, Standard



Application Description

The 7100 Controller integrates Toxic Gas, LEL or Oxygen Deficiency gas detection to provide local alarm contacts (horns, strobes, other) and indication, with serial output (Modbus Protocol) to a DCS.

- Digital Inputs with Digital Output (RS-485)
- Digital Inputs (RS-485) with Analog Outputs
- 4-20 mA Inputs with Digital Output (RS-485)
- 4-20 mA and Digital Inputs with Digital Output

The Sensidyne 7100 Controller integrates up to eight or sixteen channels of gas detection with minimum user set-up. Input tags, names, and types are assigned, and alarm levels set. Any input configuration may be copied to another channel.

System options include 8-channel input and output cards (2), 8-Relay alarm cards (6), and internal transmitter power supply. Plug-in terminal strips are used so that field wiring does not have to be removed to replace a circuit board.

The LCD graphic display provides bar graph, trending and troubleshooting modes. User configuration is simplified with menu and copy functions. All system parameters are password protected and stored in non-volatile memory. Rack-mount and explosion-proof Enclosure options provide flexibility of application.

Model 7100 Controller

ORDERING INFORMATION

Description	Part Number
7100 NEMA 4X Controller	7013931-1
7100 Rack Mount Controller	7013931-2
7100 XP Controller	7013931-3
7100 NEMA 4X 316 Stainless Controller	7013931-4
Accessories	
Auxiliary Alarm 1, Alarm 2 & Horn Relay Board	7017436
8 Channel, 4-20 mA Analog Input Board	7017437
8 Channel, 4-20 mA Analog Output Board	7017438
8 Channel Discrete 5 amp, Form C Relay Board	7017439
Alarm Relay Card, 8 SPDT	7017524
24 VDC, 150 watt Power Supply	7017467
100 db Audible Alarm	299-0018-01
Expansion Plate	7017521

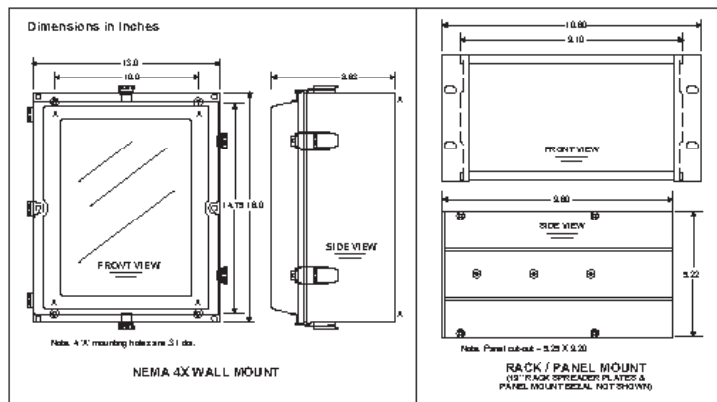
SAMPLE A & E SPECIFICATION

Furnish and install an 8 (16) channel digital controller in a NEMA 4X rated enclosure, CSA and UL approved for Class I, Division 2 hazardous (classified) areas, and which accepts RS 485 Modbus®, 4-20 mA and direct sensor inputs. Enclosure options shall include stainless steel, explosion-proof and rack mount. The Controller shall have a non-intrusive magnetic interface in all enclosure options.

The controller will have a full complement of common, horn and discrete SPDT, 5 ampere alarm relays which conform to ISA alarm sequence 3A. The front panel shall have 52 discrete LEDs to annunciate fault, alarm 1 and alarm 2 for each input plus the common alarms. Alarm options such as variable on-off delay, voting, latching, zoning, and failsafe will be programmable.

The display will be a multi-mode backlit Graphic LCD to readout monitored data, trends, bar graphs and display alarm settings and engineering units. Non-volatile memory will retain the configuration data. Dual Modbus® RS-485 serial ports for simultaneous master / slave operation shall be provided along with discrete 4-20 mA outputs.

The digital controller shall be the Model 7100 by Sensidyne.



PRODUCT SPECIFICATIONS

Material	Fiberglass.
Description	UL listed, NEMA 4X Rated, Designed for Class 1, Div. II, Groups. B, C, D.
Type	Wall mount with tabs & threaded inserts.
Dimensions	NEMA 4X 13 (W) by 16 (H) by 8.6 (D) Inches, 330 (W) by 406 (H) by 218 (D) cm.
Weight	8.3 lbs. (3.8 Kg) including sensor.
Conduit	3/4 inch EMT connector supplied (side).
Temperature	-20°C to 50°C (-4°F to 140°F)
Humidity	5-95 %RH, non-condensing.
Service	Indoor or Outdoor Locations.
Display	128 x 240 graphic LCD with backlight. Displays bar graphs, trends, and engineering units. 52 discrete LED's indicate alarm status for 16 channels and common relays
Analog Inputs	(optional) 16, 4-20 mA inputs (100 ohms impedance) includes +power supply terminals for each channel for 2 or 3 wire transmitters
Analog Outputs	(optional) 16, 4-20 mA outputs (Max load 800 ohms with nominal 24 Vdc power supply)
Alarm Relays	(optional) [Discrete] SPDT, 5 amp, 250 VAC or 40 VDC (Resistive)
Serial Ports	Master & Slave RS-485 with Transmit / Receive LEDs Modbus® RTU Protocol
Alarm Relays	[common] 4 or 8, SPDT, 5 amp, 250 VAC or 30 VDC (resistive)
Power Supply	24 Vdc, 150 watts
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, 1/2 length 19 inch rack / panel mount NEMA 7 Div explosion-proof wall mount with magnetic controls NEMA 4X 316 Stainless Steel Wall Mount

