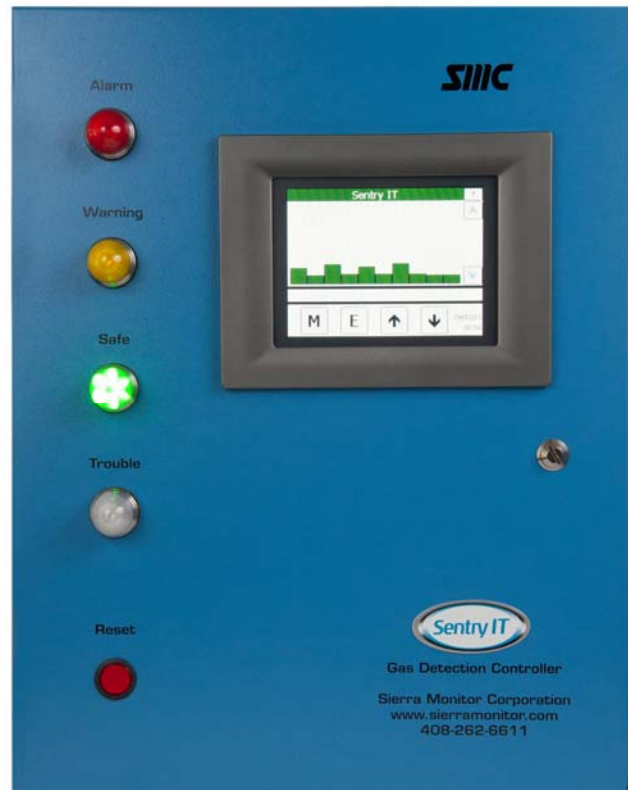*Powerful network-enabled hazardous gas detection system controller setting the standard in gas monitoring with flexible input capability and easy interface to plant-wide systems! All in a package with the flexibility to meet your specific needs.*

The Sentry IT Controller is a comprehensive hazardous gas detection monitoring system born with the flexibility and features that meet your specific applications. Sierra Monitor Corporation has been a leader in hazardous gas detection technology for over 30 years and this latest generation of controller is designed for today's detection environments requiring intelligent network interface, minimal maintenance, comprehensive diagnostic information, smart sensor communications and easy to install interconnections.

Key features of the Sentry IT Controller System include:

- ✓ Ability to interface to a wide variety of sensor communications, including Modbus RTU, 4-20 mA, SentryBus, and conventional dry contact

- ✓ Simple menu-driven configuration and operation via a large, touch sensitive, easy-to-read color touch-panel computer

- ✓ Modular internal design enabling the user to select those components needed for the application without adding multiple external boxes, yet still offer seamless interface to the system controls

- ✓ Interface capability to Sentry IT sensors and other third party sensors and devices

- ✓ Super bright LEDs indicating Safe, Alarm, Warning or Trouble conditions and external alarm reset switch

- ✓ Outputs to other control devices via re-transmit of 4-20 mA signal, 5 Amp or 8 Amp relays.

- ✓ USB flash drive interface capability for fast configuration

- ✓ Easy interface of necessary data to plantwide control systems, PC, external touch-screen panel, or more

- ✓ Retrofit option to upgrade Sentry NEMA classic to Sentry IT

- ✓ Multiple supervisory protocol interface to external control systems using Modbus RTU (Standard). Modbus TCP, EtherNet/IP, BACnet, LonWorks and other commonly used open protocols are available

- ✓ Third-party NRTL approvals pending, including FM Approval, UL, ATEX, CE Mark and SIL-2

- ✓ Battery backup capable, providing the desired stand-by power in the event of power outage

- ✓ Choice of AC or DC power interface providing power for up to 32 sensor modules

The internal modular design of the Sentry IT Controller allows the user to select the various inputs and outputs necessary to meet their specific application requirements. For instance, the user can select RS-485 Modbus RTU communication to the sensor modules, or 4-20 mA Analog, or SentryBus PSG. Output selections include re-transmitted 4-20 mA, 5 Amp relays or 8 Amp relays.

Specifications:

Power:

AC Version:	120/240 VAC +/- 10%, 50/60 Hz
DC Version:	24VDC Nominal (18-30 VDC)
Power consumption:	Controller 50W, Typical max system 200W
Battery Backup capability:	External option

Environmental:

Operating Temperature:	-14 to 131°F (-10 to 55°C) *
	Check with factory for applications outside of 32 to 122°F (0 to 50°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Relative Humidity	0-95% Non-condensing

Display

Type	5.7" color, backlit touch-screen
Environmental rating:	NEMA 4
Views:	Bar charts, text data screens, configuration screens
Other Indicators:	Integral long-life, high-intensity LED lights for Safe, Warning, Alarm and Trouble

Connectivity to external controls and systems

Controller to Ethernet:	Modbus TCP or AllenBradley Ethernet/IP (other protocols available)
Optional - Remote management:	Web browser interface
Optional - Mass storage:	Flash Drive via USB port

Connectivity to modules:

Channels:	Up to 32 module addresses
Channel power:	24VDC
Communication:	
Analog 4-20 mA	2, 3, or 4-wire per ISA specifications
Modbus RTU (Sentry IT)	RS-485 (half-duplex)
Baud:	38400 baud (adjustable 2400 – 38400)
Parity:	None
Stop bit:	1
Data bits:	8
Flow control:	None
SentryBus	Proprietary Power, Signal, Ground (PSG)
Binary Input:	Supervised or Digital Input

Output:

4-20 mA	Variable retransmission 3-wire or 4-wire
Relay:	Programmable, SPDT (multiples of 8)
Standard:	5 Amps
Optional:	8 Amps
Trouble:	5 Amps, Fail-safe

Enclosure:

Design:	Wall-mount
Material:	Painted mild Steel, 316SS, or GRP
Dimensions (HXWxD)	NEMA1: 18.0 x 14.0 x 6.0 inches (45.7 x 35.6 x 15.2 cm)
	NEMA4 SS: 20.5 x 14.4 x 8.2 inches (52.1 x 36.6 x 20.8 cm)
Weight:	NEMA1: 30.0 Lbs, (13.6 Kg) Typical
	NEMA4 SS: 35.0 Lbs, (15.9 Kg) Typical
Rating:	NEMA 1 Standard (NEMA 4 or optional NEMA 4X)

Warranty:　　　　　2 years

Ordering Information:

Model	Points/ Series	Enclosure	Stacks	Power	HMI
5000	**- XX - IT**	**- X**	**- W, X, Y, O**	**- XXX**	**- X**
5000 Series	- 08 - IT	- 1 = STD NEMA 1	- 0 = None	- A32 = AC 100/220 32/16/8ch	- 0 = Modbus RTU
	- 16 - IT	- 2 = NEMA4 SS	- 1 = Analog (16)	- D00 = DC 24V	- 1 = Sentry View (WebServer)
	- 32 - IT	- 3 = NEMA4X GRP	- 2 = PSG (16)	- D08 = DC 24V w/ 8Hr BBU	- 3 = ModbusTCP/EtherNetIP/
		- 4 = RACK Chassis	- 3 = Modbus RTU (32)	- D24 = DC 24V w/ 24Hr BBU	BACnetIP
		- 5 = 5383-00 Retrofit	- 4 = RELAY (8A) (8)		- 9 = Integrated Bridge (Custom)
		- 6 = 5383-01 Retrofit	- 5 = Analog Output (16)		
		- 9 = CUSTOM	- 6 = Digital Input (8)		
			- 7 = Carrier Only (8)		