

## SMC Sentry IT Controller

The SMC Sentry IT Controller is a comprehensive hazardous gas detection monitoring system born with the flexibility and features that meet your specific applications. SMC is a leader in hazardous gas detection technology 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.

The internal modular design of the SMC 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 Sentry Bus PSG. Output selections include re-transmitted 4-20 mA, 5 Amp relays or 8 Amp relays. Choice of AC or DC power interface providing power for up to 32 sensor modules.



## Features

- Simple menu-driven configuration and operation via a large, touch sensitive, easy-to-read color touch panel computer
- Battery backup capable, providing the desired stand-by power in the event of power outage
- USB flash drive interface capability for fast configuration
- Super bright LEDs indicating Safe, Alarm, Warning or Trouble conditions and external alarm reset switch
- Easy interface of necessary data to plant-wide control systems, PC, external touch-screen panel or more
- Universal gateway to external control systems using Modbus TCP/IP, Allen Bradley EtherNet/IP and other commonly used open protocols are available
- Interface capability to the SMC Sentry IT sensors and other third party sensors and devices
- Retrofit option to upgrade Sentry NEMA classic to Sentry IT

## Specifications

### Power

**AC Version:** 120/240V AC +/- 10%, 50/60 Hz

**DC Version:** 24V DC Nominal (18-30V DC)

**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

### Enclosure

**Design:** Wall-mount

**Material:** Painted mild Steel, 316SS, or GRP

**Dimensions (HXWxD):**

NEMA1: 18.0 x 14.0 x 6.0 in (45.7 x 35.6 x 15.2cm)

NEMA4 SS: 20.5 x 14.4 x 8.2 in (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)

### 2 Year Warranty

### Operating Range

**Channels:** Up to 32 module addresses

**Channel Power:** 24V DC 24VDC

**Communication:**

Analog 4-20 mA 2, 3, or 4-wire per ISA specifications

**Modbus RTU (Sentry IT):** RS-485 (half-duplex)

**Sentry Bus:** Proprietary Power, Signal, Ground (PSG)

**Binary Input:** Supervised Digital Input

### Connectivity to External Controls and Systems

**Controller to Ethernet:** Modbus TCP or Allen Bradley

Ethernet/IP (other protocols available)

**Optional - Remote Management:** Sentry InSite

Web-browser interface

**Optional - Mass Storage:** Flash Drive via USB port

### Display

**Type:** 5.7" color, backlit touch-screen

**Environmental Rating:** NEMA 4

**Views:** Bar charts, text data screens, alarm view,  
and zone screen configuration screens

**Other Indicators:** Integral long-life, high-intensity LED  
lights for Safe, Warning, Alarm and Trouble

### Outputs

**4-20 mA:** Variable retransmission 2-wire

**Relay:** Programmable, SPDT (multiples of 8)

**Standard:** 5 Amps

**Optional:** 8 Amps

**Trouble:** 5 Amps, Fail-safe

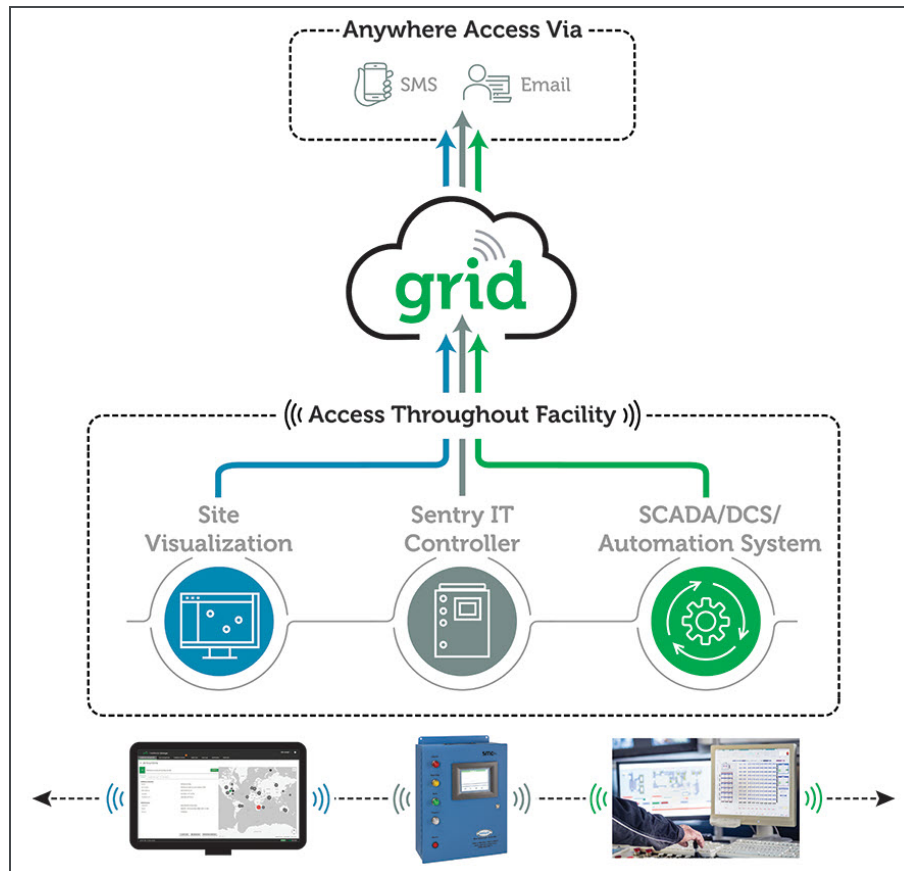
### Approvals

UL2017 by Intertek Certificate # 4009658

UL60950 by MET Laboratories Certificate # E113697

Suitable for SIL 2 service, IEC 61508 standard

ABS: Certificate of Design Assessment



Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

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