

MODEL SCX

GAS DETECTION CONTROL SYSTEM

The SCX is a fully scalable gas detection control system for continuous monitoring and measurement of hazardous gases in local and distributed environments, complete with alarm capabilities. It supports both analog and digital devices - up to 32 sensors and eight distributed analog devices - with auto-configuration for Safeguard Analytics smart sensor modules and an easy-to-navigate color HMI. Available models include the SCX-400M, SCX-800M, SCX-1600M, SCX-3200M, SCX-400A, and SCX-800A.



SPECIFICATIONS¹

SYSTEM

Capacity	Up to 32 sensors with optional 8 analog devices
Display	Color status LCD HMI
Input Signal	Modbus RTU 9600 bps
Output Signal	Modbus RTU 9600 or 115200 bps

MECHANICAL

Modbus Only	8 in (W) x 10 in (H) x 6 in (D)
Analog	10 in (W) x 14 in (H) x 6 in (D)

ELECTRICAL

Direct Input	90-240 VAC 50/60 Hz, 80 W
Auxiliary Power	10-30 VDC
Power Consumption	3 W without sensors
Alarm Relays	Level 1, 2, 3 + Fault (Form C 10 A contacts)

AREA CLASSIFICATION

Location	Non-hazardous locations
Enclosure	NEMA 4X weatherproof

ENVIRONMENTAL

Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Humidity	0-99% non-condensing

Pressure	1 atmosphere $\pm$ 0.1
Note	Power consumption and temperature requirements are sensor dependent

WARRANTY

Transmitter	2 years
Smart Sensor	Sensor technology dependent

Specifications subject to change without notice.

FEATURES

System Controller

- Up to 32 sensors plus optional analog input for up to 8 devices (model dependent)
- Color LCD HMI with green, amber, red, and blue status indicators
- Serial RS-485 Modbus RTU output
- Wired or wireless 915/868 MHz installation options
- Optional relay output
- Suitable for battery and solar power applications

Environmental & Enclosure

- -40 °C to +60 °C (-40 °F to +140 °F)
- 15% to 95% RH non-condensing
- NEMA 4X weatherproof enclosure
- Non-hazardous locations

Electrical

- Standard: 10-30 VDC
- Optional: 90-240 VAC line power
- Alarm relays: Level 1, 2, 3 + Fault (Form C 10 A contacts)

APPLICATIONS

- Local monitoring panels
- Plant-wide distributed networks
- Mixed analog and digital sensor environments
- Battery and solar-powered remote sites