SENTRY io® Controller Datasheet

MSA
The Safety Company

SENTRY io

Flexible Platform

- Multiple communication interfaces: Modbus TCP/IP, EtherNet/IP, optional Modbus RTU.
- Robust logic control features such as cause and effect and voting schemes.

Intuitive Interface

- Guided setup workflows that walk users through setup process during commissioning saving valuable time.
- Easy to read operating dashboard that puts the important information in front of the user in a way that can be understood quickly.

Ease of Use

- Auto-recognition for a robust library of MSA and General Monitors® devices through HART communication.
- Third party device support with 4-20 mA input capabilities.

Advanced Diagnostics

- Data and event logging provides operators with the information they need to administer and maintain system.
- Each measuring channel is identified by unique device ID, serial number, and type of measured gas.
- Quick overview of status, fault code, and date of last calibration is available for connected measuring points.

Scalable Platform

- Device Level Ring (DLR) networking option reduces installation costs and complexity, with a loop topology to connect multiple controllers in a single run.

Cloud Connectivity

- Remote monitoring and notifications available as a subscription *(available in select regions)*.

SAFEGUARDING
PEOPLE, PLACES & THE **PLANET**

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System Specifications

AUTO-RECOGNIZED PRODUCTS (EZ-ID, via HART)	ULTIMA® X5000 Gas Monitor, ULTIMA X Gas Monitor, PrimaX® Gas Monitor Series, Senscient ELDS™ Open Path Gas Detector, General Monitors® S5000 Gas Monitor, IR400 Point IR Gas Detector, IR5500 Open Path Infrared Gas Detector, FL4000H MSIR Flame Detector, FL500 UV/IR Flame Detector
COMPATIBLE PRODUCTS	MSA, General Monitors, and analog/discrete third party instruments
DISPLAY	7" (178 mm) touchscreen LCD
LANGUAGES	English, French, German, Italian, Portuguese, Spanish, Chinese
FUNCTIONAL INDICATORS	System Normal, Alarm, and Fault *(located on touchscreen)*
PRE-PROGRAMMED FUNCTIONS	Remote Reset, Remote Silence dry contact inputs
REMOTE ACCESS CAPABILITY	Remote display is available option through Ethernet connection
DIGITAL COMMUNICATIONS SUPPORTED	Modbus TCP/IP, Modbus RTU *(optional)*, EtherNet/IP/DLR *(consult factory for setup)*
PROGRAM STORAGE / RETRIEVAL / BACK UP OPTIONS	USB or SD card
HAZARDOUS AREA CLASSIFICATION	Class I, Div 2 (Groups A, B, C, & D)
WARRANTY	2 years
CLOUD ENABLED	Yes
APPROVALS	cFMus *(for electrical safety, hazardous locations and gas performance)*, ATEX and EMC Directives, IECEx, UKCA, CE marking. Gas performance to the following standards: FM 6340, FM 6320, ANSI/ISA 92.00.01, ANSI/ISA 92.04.01, ANSI/FM/CSA/IEC/EN 60079-29-1, EN 50104.

Electrical Specifications

INPUT POWER	85-264 VAC, 50-60 Hz *(auto-switching input)*
POWER CONSUMPTION	1.4 Amps @ 24 VDC *(controller alone)*
POWER CAPACITY	8.6 Amps @ 24 VDC *(max field device power available at 24 VDC)*
MAXIMUM NUMBER OF INPUTS	16 analog or 16 analog with HART gas detectors 6 discrete dry contact inputs
INPUT TYPES SUPPORTED	Analog with HART, discrete dry contact inputs
MAXIMUM NUMBER OF OUTPUTS	56 relays, 16 analog outputs
OUTPUT TYPES SUPPORTED	Relays, analog outputs
OUTPUT RELAY CONTACTS	
MAXIMUM LOAD	2 Amp @ 240 VAC resistive, 2 Amp @ 30 VDC resistive
MINIMUM LOAD	1 mA @ 5 VDC resistive
GROUND FAULT MONITORING	No

Environmental Specifications

TEMPERATURE RANGE	-4°F to 149°F (-20°C to 65°C)
STORAGE TEMPERATURE RANGE	-4°F to 149°F (-20°C to 65°C)
HUMIDITY	20% to 95% RH, non-condensing

Mechanical Specifications

HOUSING	Fiberglass, NEMA 4X, IP65
DIMENSIONS	22" x 17.62" x 9.5" (559 x 448 x 241 mm)
WEIGHT	44 lb. (20 kg), based on a 16 point / 56 relay unit

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