SENTRY io® Controller

Intuitive Design Meets Powerful Functionality

Take Control of Your Safety System

EZ-ID synchronizes and pre-populates details of HART-enabled MSA gas and flame detectors in 1 click

Intuitive dashboard with multi-lingual 7" (178 mm) HMI touchscreen allows users to navigate configuration, operation, and troubleshoot workflows

Robust configuration options include cause/effect and voting

SENTRY io

8 or 16 input channels, up to 56 relays, and available analog outputs

Advanced networking capabilities

On-board diagnostic tools like real time HART diagnostics and channel trends

The SENTRY io brings control and reliability into the hands of operators with an easily-configurable, wall-mounted controller that supports up to sixteen gas and flame detection channels. Designed to meet the demanding and increasingly complex needs of industrial processes, the SENTRY io Controller delivers a unique, streamlined user experience with total control.

Streamline Workflows to Meet Growing Demands

Configurable

• Menu-driven approach to control logic configuration, delivering flexibility and offering custom control capabilities for users without programming experience

Scalable

• Equipped with digital industrial protocols to provide users with networking options that deliver time and cost savings in projects

• Lowers wiring expenses and complexity by leveraging Device Level Ring (DLR) capabilities to connect multiple controllers in a single run

Intuitive

• Operating dashboard displays vital information in a user-friendly, transparent manner

• SmartStart Configuration Wizard guides users through the setup process during commissioning, saving valuable time

Cloud Connectivity

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

System Configuration Options

Standard

• Integrated CPU and 7" (178 mm) HMI touchscreen

• 8 or 16 analog input channels

• Configurable with 6 user-assignable discrete inputs

• Options of up to 56 relays

• 3 common relays: fault, alarm, and panel horn

• Internal buzzer (85 dB)

• Modbus TCP/IP

• EtherNet/IP™ for Allen-Bradley® DLR

Options

• Analog outputs

• Backup battery *(available as a custom solution)*

• RS-485 adapter for Modbus RTU output

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 MINIMUM LOAD	 2 Amp @ 240 VAC resistive, 2 Amp @ 30 VDC resistive 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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