



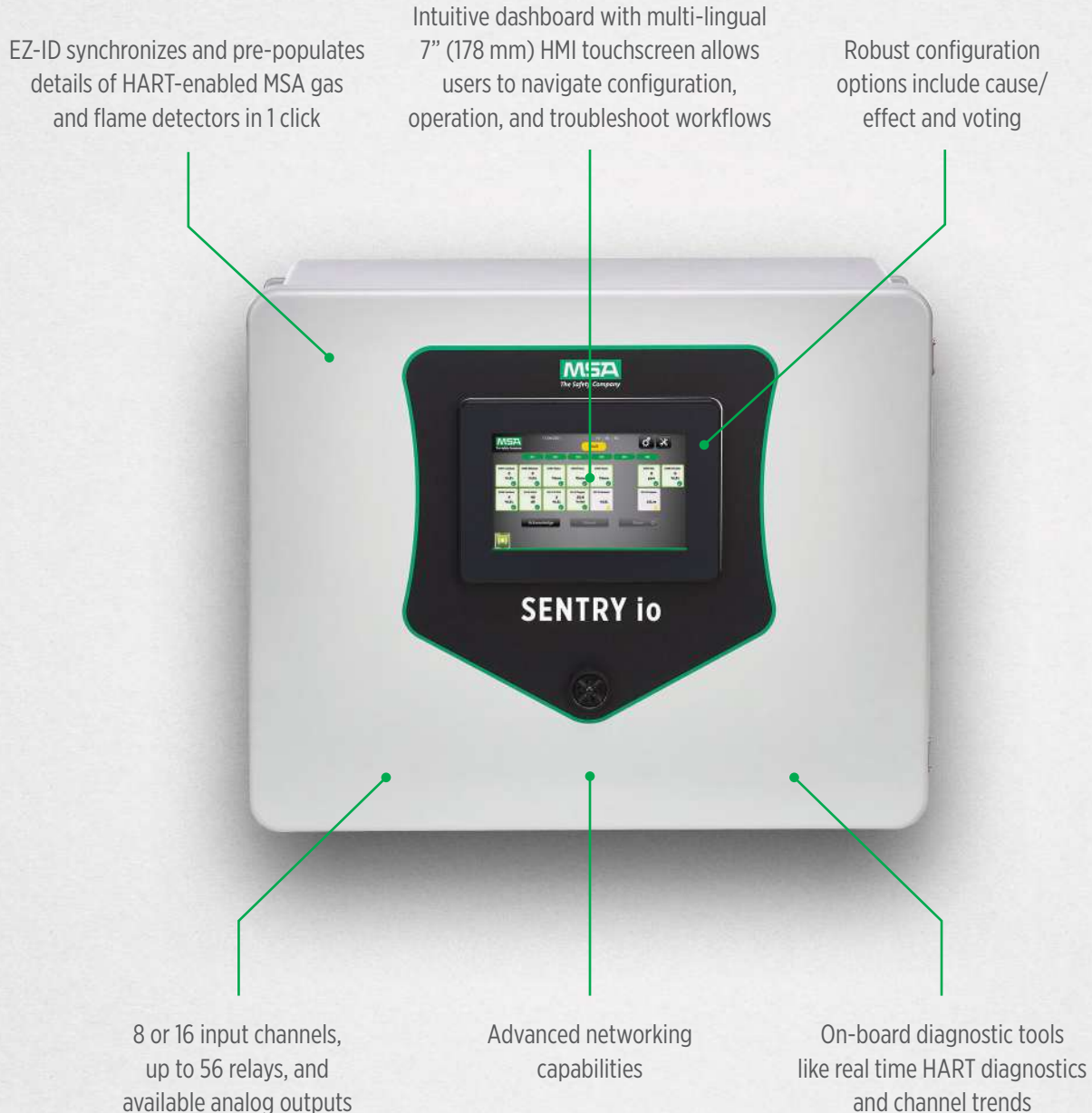
# SENTRY io<sup>®</sup> Controller

Intuitive Design Meets  
Powerful Functionality



SAFEGUARDING  
**PEOPLE, PLACES & THE PLANET**

## Take Control of Your Safety System



*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, Observer® i Ultrasonic Gas Leak 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 ( <i>located on touchscreen</i> )  |
| 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 ( <i>optional</i> ), EtherNet/IP/DLR ( <i>consult factory for setup</i> )  |
| 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 ( <i>for electrical safety, hazardous locations and gas performance</i> ), 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 ( <i>auto-switching input</i> )                            |
| POWER CONSUMPTION         | 1.4 Amps @ 24 VDC ( <i>controller alone</i> )                                   |
| POWER CAPACITY            | 8.6 Amps @ 24 VDC ( <i>max field device power available at 24 VDC</i> )         |
| MAXIMUM NUMBER OF INPUTS  | 16 analog or 16 analog with HART gas detectors<br>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 3X, 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 |