

SWN-WIO

Wireless Input and Output Module



The **SWN-WIO** is a wireless, multi-function, DIN rail-mounted Input/Output module that integrates many sensory devices and load control capabilities with SiteWorx Sense.

To integrate sensory devices, the SWN-WIO supports Modbus devices such as Airborne Particle Counters, Air Quality Monitors, Differential Pressure Sensors, Flow Sensors, Accelerometers, Gas Sensors, and more.

In addition, the SWN-WIO supports analog sensors, probes, and noise-level sensors.

Relay control and power load control support are capabilities included and easily implemented.

The SWN-WIO is a robust, multi-function, smart device that connects diverse equipment, sensors, and more — bringing insights and actions to SiteWorx Sense.

Date: _____

Quantity: _____

Company: _____

Project: _____

SiteWorx Application

- SiteWorx Sense



Key Features & Benefits

- Native Modbus Support — utilize serial Modbus-enabled sensors and monitoring devices within SiteWorx Sense. Devices such as Airborne Particle Counters, Air Quality Monitors, Differential Pressure Sensors, Flow Sensors, Accelerometers, Gas Sensors, and more are supported
- Provides native 0-10V, 4 to 20 mA, and pulse counting compatibility to interface with a variety of industrial sensors, relays, and load control devices — reducing integration costs and installation complexity
- Monitor facility environment, optimize processes, or better understand line-level cost allocation through real-time data
- Dramatically reduce reporting time by automating auditable, secure, and unalterable record storage and reporting
- Enables SiteWorx® Sense to monitor sensory data and environmental conditions from a variety of compatible sensor types
- Incorporates and extends the SiteWorx wireless mesh network

Specifications

SENSING AND CONTROL

Smart Device Integration

- Allows integration of a wide-range of supported analog sensor types to monitor operational status of equipment and environmental conditions, such as vibration levels, air quality, and more
- Built-in pulse counting provides native support for volumetric flow metering to measure consumption of resources, such as water and gas

Load Control

- Enables automated load control for motors, fans, and other facility equipment

Network Communication

- SiteWorx Wireless Mesh Network
IEEE 802.15.4 enabling communication with SiteWorx Smart Devices

Technology Platform

- Incorporates and extends the SiteWorx wireless mesh network

PERFORMANCE

Analog Measurement Accuracy

- Voltage mode $\pm 2\%$
- Current mode $\pm 2\%$

Sample Interval

- 1 to 5 minute (5 minute default)

Sampling Resolution

- 12-bit

ELECTRICAL

Input Voltage

- 120 to 277 VAC or 24 VDC (Class 2))

Surge Protection

- Per IEC-61010

Input Power Consumption

- 0.5 W quiescent, 4 W maximum

Pulse Count Input

- Dry Contact or Active Level
(4V threshold, 24V maximum)

Analog Inputs

- (2x) 4 to 20 mA / 0 to 10 VDC

Analog Input Voltage (in Voltage Mode)

- 0 to 24 VDC (1.5V in 4 to 20 mA mode)

Relay Output

- Switch relay up to 60V, 0.5A

Auxiliary Output

- 24 VDC, 2.75 W maximum

Serial Port

- RS-485 Modbus RTU

ENVIRONMENTAL

Operating Temperature

- -20° to 50°C (-4° to 122°F)

Operating Humidity

- 0% to 95%, non-condensing

PHYSICAL

Enclosure

- PC plastic

Dimensions (H x W x D)

- 107 x 91 x 58 mm (4.2 x 3.6 x 2.3 inches)

Weight

- 224 g (7.9 oz)

Mounting Option

- DIN Rail Mount — 35 mm (1.4 inches)

WARRANTY

- 5-Year Limited

CERTIFICATIONS & SAFETY

Approbations

- ETL, CE, UKCA, FCC Part 15 Class B

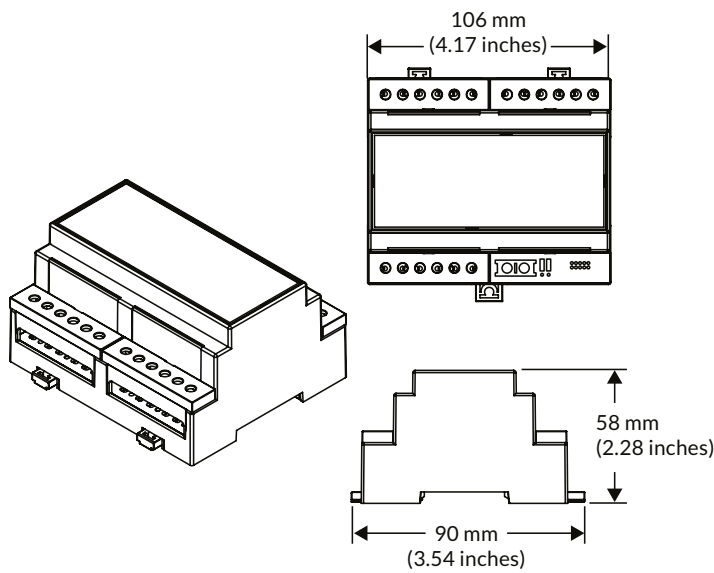
Environmental Suitability

- IP20



SiteWorx **Sense**

Dimensions



Ordering Information

Part Number

SWN-WIO-MP

Wiring Diagram

