



RLH Industries, Inc.

DATA SHEET

The leader in
rugged fiber optic
technology.

DS-107 2024A-0930

Smart⁴ Input Sensor

CONTACT CLOSURE OVER ETHERNET

Ethernet I/O

The Smart Input Sensor is an Ethernet device with 4 integrated digital inputs. The device allows for web based monitoring of the inputs and may be integrated into distributed control and network management systems to allow those systems to alarm and monitor field devices. Each of the Inputs can be individually configured to send customized emails and notifications when an event is recorded. The device supports a wide variety of protocols it is compatible with over Ethernet.

Contact Closure Over Ethernet

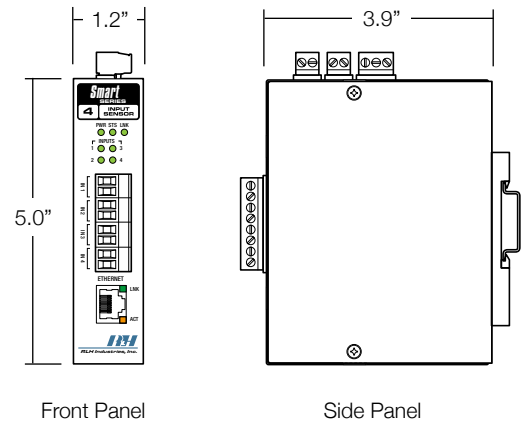
The Smart Input Sensor may be paired with a Smart Relay Output. RLH's System Link allows two devices to become linked, establishing a tunnel over an Ethernet network. Allowing for transport of digital outputs over Ethernet. The System Link feature can be set up via: One to One, Many to One, and One to Many.

Key Features

- Rugged Design - Operating temp. -40°C ~ 70°C
- PoE Powered device - Can be powered by any IEEE 802.3af compliant PoE source
- Intuitive and secure web interface for configuration
- 4 Inputs for multiple device monitoring
- System Link - Pair with a Output Device for Alarm Transportation over Ethernet
- IGMP V2 supported to enable multicast routing in one to many configurations.
- Custom email notification settings for individual inputs
- Integration options include: SNMPv1, 2c, 3, SNMPv1 & 2c Traps, Modbus TCP, and DNPv3 TCP
- Input event log with time stamps
- Each input is optically isolated
- Includes both DIN clip and wall mount ears for easy installation.
- System power ranges available: 24-48VDC, 125VDC, & 12VDC
- 10/100 Fast Ethernet Port
- Limited Lifetime Warranty



RLH Smart Series Input Sensor



Front Panel

Side Panel

Dimensional Information

Specifications

Powering Voltage	Standard Model	24~48VDC	
	-A Model	125VDC	PoE Powering Disabled
	-B Model	12VDC	PoE Powering Disabled
Power Consumption	6 Watts (Maximum)		
PoE Powered Device	IEEE 802.3af compliant		
Wire Connectors	Screw down terminal block, 16~26AWG		
Inputs 1~4 Polarity Insensitive	SM-IN4-DR-2	Dry (0-100 ohms)	Optical isolation 3.5kV
	SM-IN4-12-2	Wet (5~15VDC / 5mA)	Optical isolation 3.5kV
	SM-IN4-48-2	Wet (20~52VDC / 5mA)	Optical isolation 3.5kV
System Status Alarm	Normally Open/Closed Relay (SPDT)		
System Link Response Time*	One-To-One (TCP)	Typical 8ms, Maximum 45ms	
	One-To-Many (UDP)	< 15ms	
	Many-To-One (TCP)	< 250ms	
	<i>* Specification listed is based on direct connections. Network overhead should be considered when calculating overall system response times.</i>		
Data Interface	Ethernet (RJ-45)		
Data Rate	10/100Mbps IEEE 802.3 Compliant		
Surge Protection	Varistor (MOVs) and automatic resettable fuse (PTC Thermistor)		
DC Input Isolation	1.5kV		
Construction	Powder coated steel and aluminum alloy		
Physical Dimensions	H 4.93" x W 1.20" x D 3.93" (125mm x 31mm x 100mm)		
	Not including connectors or DIN clip		
Mounting Style	Standard DIN rail (T-35) or wall mount (with included ears)		
Operating Temperature	-40°F to +158°F (-40°C to +70°C)		
Humidity	95%		
MTBF	175,000 Hrs. (Circuit Board level)		
Warranty	Limited Lifetime		

Ordering Information

Part Number	Description	Dimensions
SM-IN4-48-2	Smart Series Input Sensor Wet Input (24-48VDC)	H 5.0 in. x W 1.2 in. x D 3.9 in. (127mm x 31mm x 100mm)
SM-IN4-12-2	Smart Series Input Sensor Wet Input (5-15VDC)	H 5.0 in. x W 1.2 in. x D 3.9 in. (127mm x 31mm x 100mm)
SM-IN4-DR-2	Smart Series Input Sensor Dry Input	H 5.0 in. x W 1.2 in. x D 3.9 in. (127mm x 31mm x 100mm)

- ▶ Please contact your RLH sales representative for pricing and delivery information.
- ▶ Add **-A** to the end of the part number for 125VDC input power option.
- ▶ Add **-B** to the end of the part number for 12VDC input power option.