

# IO Connect.

## Multi-purpose Controller



**Advanced I/O & Relay controller for a wide range of automation and wireless IoT applications**

## Product Overview

MachineSens IoT® **IO Connect** is the next generation multipurpose I/O and relay controller designed to streamline your automation needs. From industrial settings to smart building applications, **IO Connect** offers unparalleled versatility and reliability.

**IO Connect** empowers you to effortlessly manage a wide range of devices and systems and seamlessly integrate with sensors, actuators, switches, motors, pumps, ventilation fans, and more, while leveraging its robust relay functionality for precise control over your operations. Its modular design and expandable I/O channels offer flexibility and customization options.

**IO Connect** can be mounted either on a DIN rail with a DIN rail housing or directly mounted in an IP Rated Control panel board.

This device can be configured to support numerous industry standard protocols such as BACnet™, Modbus TCP (RS 485), TCP/IP etc and wireless communication through LoRaWAN® and Wi-fi.

## Product Features



Customizable I/O &  
Relay module  
configuration



Wireless data transmission  
Option through  
LoRaWAN®, and/or WIFI



Secure operation  
with top-down  
encryption (Wireless  
models)



Supports control of  
both AC & DC  
powered devices



Suitable for Centralized  
Control and Monitoring  
of broad range of devices  
& system



Integration with Building  
Management System  
(BMS) and Industrial  
Automation systems



## Control Board Specifications

Technical	
Number of I/O Ports	18/30
Analog Input	4 Channels / 8 Channels
	0-10VDC
Industrial Current Sensor	4 – 20mA Range
	4 Channels
Digital Inputs (Fully Isolated)	4 Channel / 8 Channels
	5KV Isolation
	3.3-24VDC logic level supported
Relay Output	4 Channels / 8 Channels
	Dry contact support (5A-250VAC)
	NO Type output
USB Interface	Standard Micro USB port
Serial communication	UART Active for Data communication and monitoring
Input Power	230V AC / 5V DC (1000mA)
Reset Option	Onboard Reset available
Wireless Communication	LoRa/LoRaWAN
	863-868 Mhz
	Full OTTA (Supported for Uplink and Downlink)
	Default Uplink active interval (60 sec).
Device Class	Class A
Wi-Fi	2.4 Ghz with WPS Security
Operating Temperature	-20°C to + 65°C
Relative Humidity	0% to 85% RH (non-condensing)
Mounting Options	Wall & DIN Rail
Dimensions	155mm X 84mm



## Extensible Relay Board Specifications

The extensible relay board supports extending the **IO Connect** multipurpose controller's standard 4 Channel/8 Channel relay outputs additional relay outputs based on customized project requirements offering scalability.

Relay board can be provided with 5A, 10A & 16A current rating based on the relay output connected load.

Technical	
Operating Temperature	-40°C to + 70°C
Contact Arrangement	1A, 1B, 1C
Contact Resistance	50 mOhms (at 1A 24VDC)
Max. Switching Voltage	240V
Max. Switching Current	5A, 10A and 16A

Certifications	
Regulatory	CE
Environmental	RoHS