OIC-4I/O

OIC-8I/O

OIC-16I/O

Quick Installation Guide

Hoatech Contact Closure over Fiber Optic Converter

Edition 1.0, September 2020

Technical Support Contact Information

www.hoatech.com.tw/contact.php

Overview

The OIC series is designed to enable customers to get the highest performance at the lowest budget, and to fully cooperate with all types of dry contact trigger devices on the building automation and environmental control market. Including the application of alarm triggering, PIR signal transmission, fire alarm systems, traffic signal control or gate control. This series support both dry contact and non-dry contact signals. This model provides transmission of 4/8/16 independent input signals over fiber optic cable and each unit features NC/NO/GND contact for system monitoring.

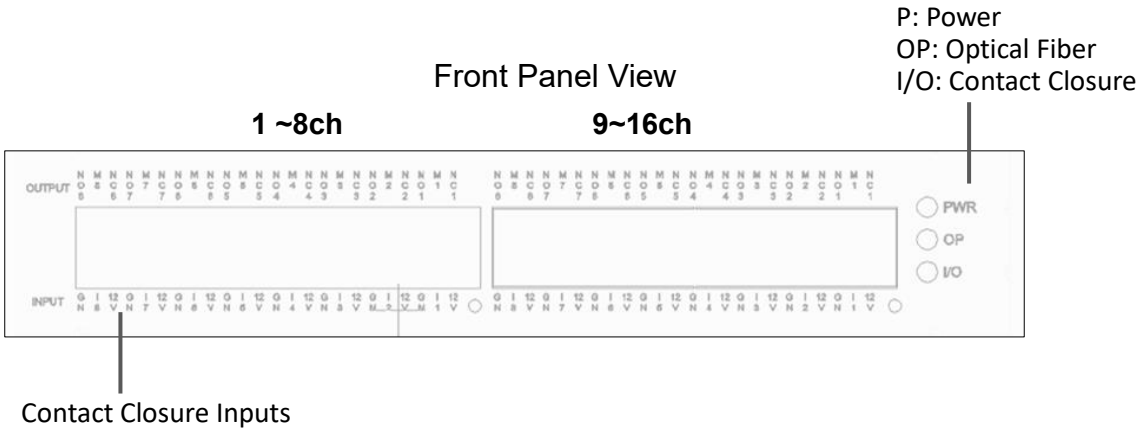
Package Checklist

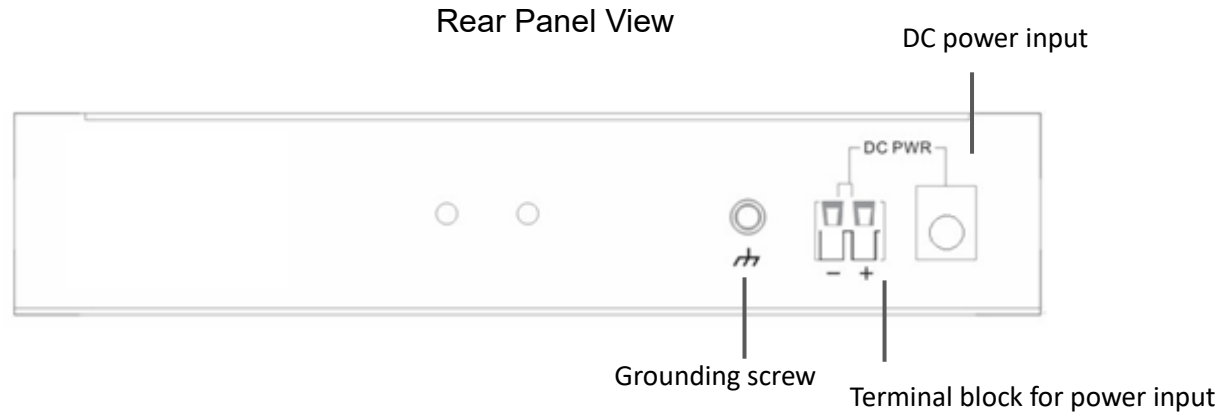
- OIC Transmitter
- OIC Receiver
- Quick Installation Guide (printed).
- Rack Ears

Features

- Transmits 4/8/16ch contact closure signals over only 1 fiber.
- Distance up to 120km (*Standard stock: 10km)
- 30VDC, 1A /124VAC, 0.3A relay Normally open
- Built-in relay surge protection
- Point-to-point transmission
- Redundant power inputs with polarity reversal protection
- Support 9/125um single mode fiber; 50/125, 62.6/125um multi-mode fiber
- Wide range operating temperature（-40℃～+75℃）

Panel Layout of the OIC Series





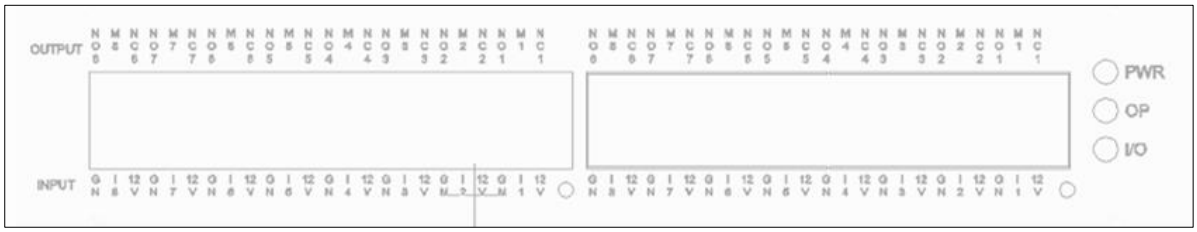
How to Connect OIC Series?

Contact Closure Input

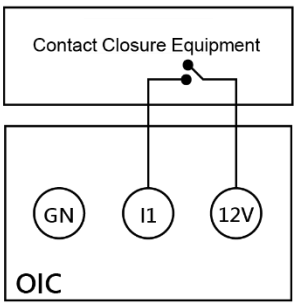
When connect TX, please refer to the **INPUT** at the bottom of the panel.

Contact Closure Output

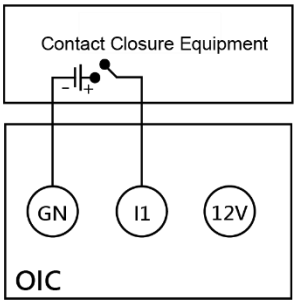
When connect RX, please refer to the **OUTPUT** at the upper side of the panel.



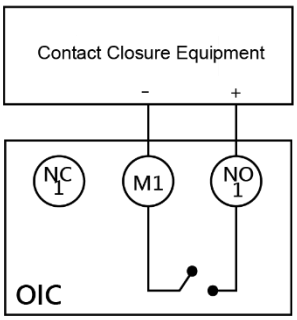
TX Transmitter
Input: Dry Contact Input (0-100ohms)



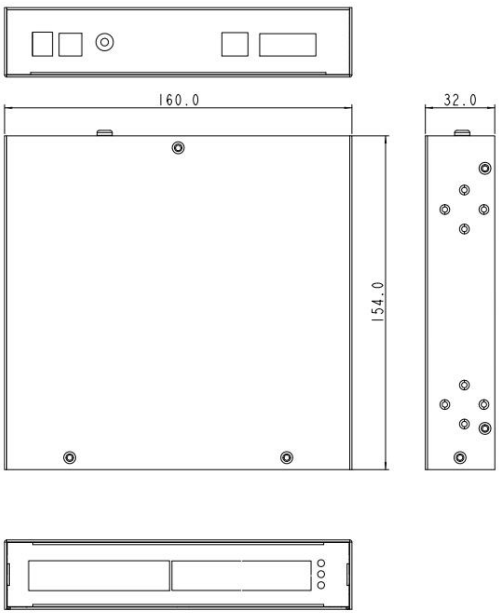
Input: Wet Contact Input (12-24VDC/3mA)



RX Receiver
Output: The device does not require power to trigger it.



Dimension Diagram (Unit: mm)



Grounding the Hoatech Industrial Contact Closure over Fiber Converter

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

ATTENTION

This product is intended to be mounted to a well-grounded mounting surface such as a metal panel.

Redundant Power Inputs

Both power inputs can be connected simultaneously to live DC power sources. If one power fails, the other live source acts as a backup, and automatically supplies all of Fiber Converter's power needs.

Wiring the Redundant Power Inputs

Besides the DC Jack socket, you can insert the negative/positive DC wires into the V-/V+ terminals. To keep the DC wires from pulling loose, use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector. Last, insert the plastic terminal block connector prongs into the terminal block receptor, which is located on the rear panel.

ATTENTION

Before connecting the OIC series to DC power inputs, make sure the DC power source voltage is stable.

LED Indicators

The front/rear panel of Hoatech Industrial Contact Closure over Fiber Converter contains several LED indicators. The function of each LED is described in the table below.

LED		Color	Status	Description
Transmitter (TX)	PWR	Green	ON	Power is being supplied to power input.
			OFF	Power is not being supplied to power input.
	OP	-	OFF	Normal
	I/O	Green	ON	Input ON (Active)
			OFF	Input OFF
Receiver (RX)	PWR	Green	ON	Power is being supplied to power input.
			OFF	Power is not being supplied to power input.

	OP	Green	ON	Paired via fiber connection
			OFF	Not paired.
	I/O	-	OFF	Normal

Specifications

Fiber	Port	1
	Type	Multi-mode：50/125, 62.6/125um Single mode：9/125um
	Connector	SC/ST/FC
	Transmission rate	155M
	Distance	0~120km*according to the fiber module type。 Standard stock: 10km
	Wavelength	Multi-mode：850nm/1310nm Single mode：1310nm/1550nm.
Contact Closure	Channel Number	4/8/16 x one way
	Output SPST Relay	30VDC, 1A /125VAC, 0.3A relay output, normally open
	DC Input Isolation	1.5kv
	Response Time	< 3m sec
	Connector	Screw down terminal block
Physical	LED indicators	Power(PWR)、Fiber Operation(OP)、Contact closure(I/O)
	MTBF	> 50,000 hours
	Power input	DC 12V 1A, Redundant power input, Removable terminal block
	Power consumption	≤ 5W
	Weights	750g
	Dimensions	160x32x155mm
	Working temperature	-20℃～+75℃
	Storage temperature	-40℃～+85℃
	Humidity	0~95% (Non-condensing)
	Certifications	CE, FCC