



I-8084W

4/8-ch Counter/Frequency/Encoder Input Module

Features

- Support 8 Up Counter (Minimum Pulse Width=2 μs)
- Support 8 Frequency (Minimum Pulse Width=2 μs)
- Support 4 Up/Down Counter (Minimum Pulse Width=2 μs)
- Support 4 Dir/Pulse Counter (Minimum Pulse Width=2 μs)
- Support 4 A/B Phase Counter (Minimum Pulse Width=2 μs)
- Support 1~32767 (us) digital filter
- Support isolated input signals
- Equip with Power and Input signal LED indicators



Introduction

I-8084W-G is a 32 bits (hardware) high speed Counter/Frequency/Encoder I/O with "Up Counter", "Frequency", "Up/Down Counter", "Dir/Pulse Counter" and "A/B Phase Counter" mode. I-8084W-G can has variety mode combination for all 8 channels. That means it can use some channels as "Up Counter" and others as "Frequency" or "A/B Phase".

System Specifications

LED Indicators	
System LED Indicator	1
I/O LED Indicator	8
Isolation	
Intra-module Isolation, Field-to-Logic	1000 Vrms
EMS Protection	
ESD (IEC 61000-4-2)	±2 kV Contact for Each Terminal
Power	
Consumption	1 W
Mechanical	
Dimensions (W x L x H)	30 mm x 115 mm x 102 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	5 ~ 95 % RH, Non-condensing

Applications

- Building Automation
- Factory Automation
- Machine Automation
- Remote Maintenance
- Remote Diagnosis
- Testing Equipment

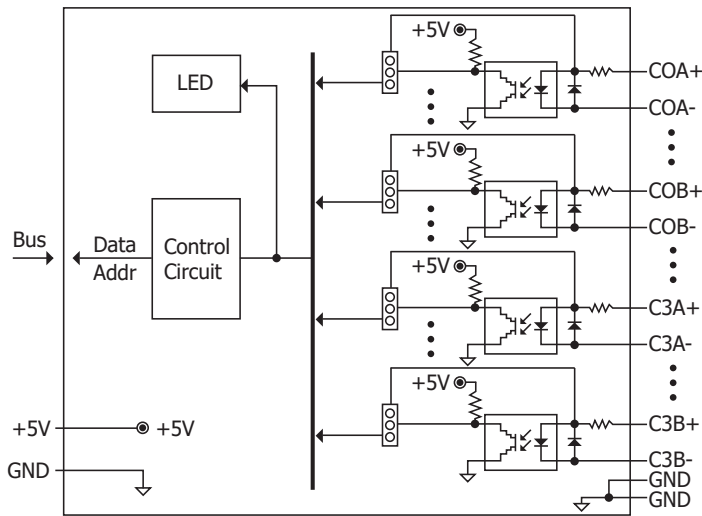
I/O Specifications

Counter/Frequency/Encoder Input		
Mode	Counter & Frequency	4-ch Up/Down Counter (CW/CCW)
		4-ch Dir/Pulse Counter (Bi-direction)
Isolated Input Level	Counter & Frequency	4-ch A/B Phase (Quadrant Counting)
		8-ch Up Counter
	Digital Noise Filter	8-ch Frequency
		1 ~ 32767 μs
Isolated Input Level	On Voltage Level	+4.5 ~ +10 VDC
	Off Voltage Level	+1 VDC max
	Minimum Pulse Width	2 μs
Isolated Input Level	Input Frequency	1 Hz ~ 250 kHz, Frequency Accuracy = ± 0.02 ~ 0.025 % (Note)

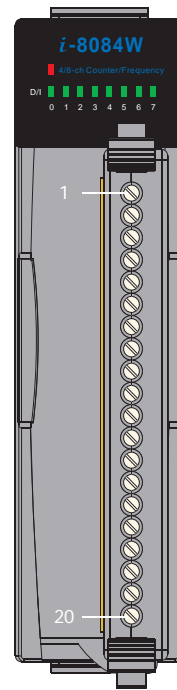
Note:

Input Frequency	Measurement Mode	Accuracy
< 10 Hz	1 Pulse Mode	± 0.02 %
10 KHz	11 Pulse average Mode	± 0.01 %
10 KHz ~ 100 KHz		± 0.015 %
100 KHz ~ 250 KHz		± 0.025 %

Internal I/O Structure



Pin Assignments



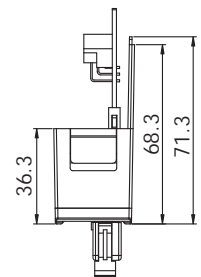
Terminal No.	Pin Assignment
01	COA+
02	COA-
03	COB+
04	COB-
05	C1A+
06	C1A-
07	C1B+
08	C1B-
09	C2A+
10	C2A-
11	C2B+
12	C2B-
13	C3A+
14	C3A-
15	C3B+
16	C3B-
17	GND
18	GND
19	N.C
20	N.C

Wire Connections

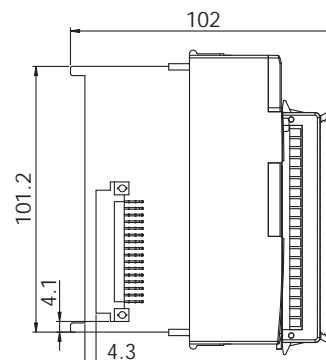
Counter Type	Isolated
Dir/Pulse	Pulse+ CxA+ Pulse- CxA- Dir+ CxB+ Dir- CxB-
Up/Down	Up+ CxA+ Up- CxA- Down+ CxB+ Down- CxB-
UP	Up0+ CxA+ Up0- CxA- Up1+ CxB+ Up1- CxB-
A/B Phase	A0+ CxA+ A0- CxA- B0+ CxB+ B0- CxB-

Frequency Type	Isolated
Frequency	Freq0+ CxA+ Freq0- CxA- Freq1+ CxB+ Freq1- CxB-

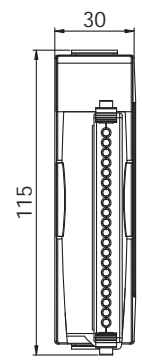
Dimensions (Unit: mm)



Top View



Left View



Front View

Ordering Information

I-8084-G CR	4/8-channel Counter/Frequency/Encoder Module (RoHS)
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