



I-8090W

3-axis Encoder Input Module

Features

- 3-axis, 16-bit Encoder Counter
- 32-bit Encoder Counter by Software
- Maximum Counting Rate : 1M pulse/sec
- Differential Input A+, A-, B+, B-, C+, C-
- Quadrant Counting Mode, CW/CCW Counting Mode, Pulse/Dir Counting Mode
- 2500 VDC Optical Isolation



Introduction

I-8090W is a 3-axis encoder counter board on iPAC-8000 platform. Its each axis can be independently configured as one of Quadrant, Pulse/Direction or CW/CCW input mode. The maximum input rate for Quadrant mode is 1 MHz. The application of I-8090W board is position/distance measurement, velocity measurement, feedback for motor control, handwheel input and so on.

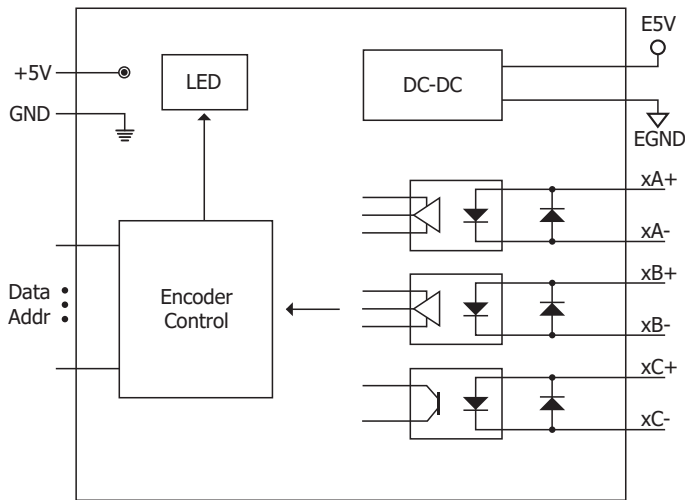
System Specifications

LED Indicators	
System LED Indicator	1
I/O LED Indicator	8
Isolation	
Intra-module Isolation, Field-to-Logic	2500 VDC
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal
Power	
Consumption	3.4 W Max.
Mechanical	
Dimensions (W x L x H)	31 mm × 114 mm × 86 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90 % RH, Non-condensing

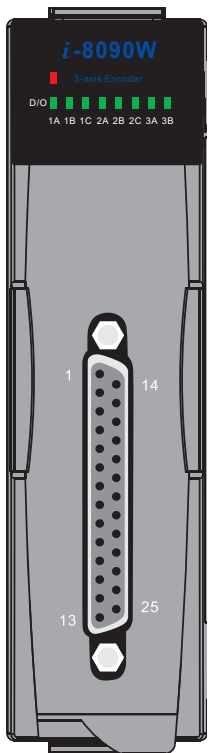
I/O Specifications

Encoder Input	
No. of Axes	3-axis
Resolution	16-bit (32-bit encoder counter by software)
Mode	1. Quadrant Counting, 2. CW/CCW, 3. Pulse/Dir
Contact Rating	1 MHz

Internal I/O Structure



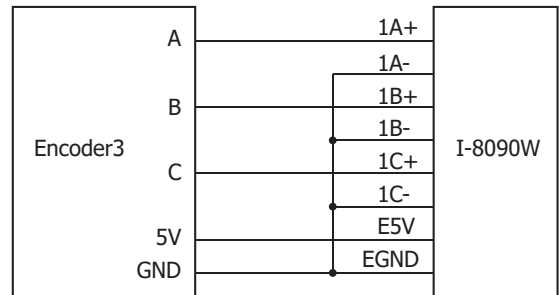
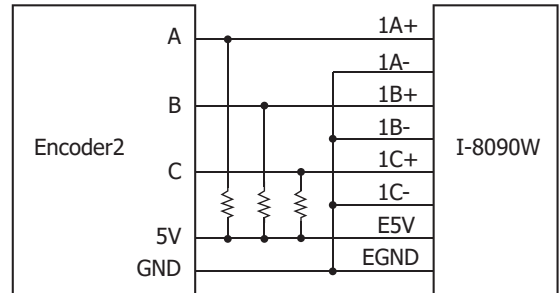
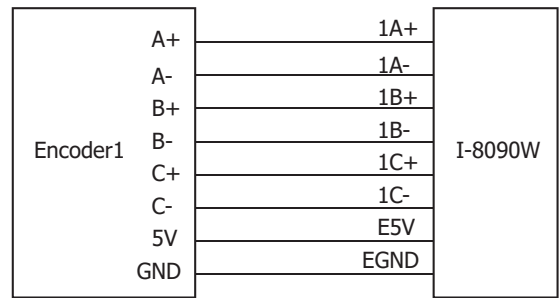
Pin Assignments



Pin Assignment	Terminal No.	Pin Assignment
A+	01	14 A-
B+	02	15 B-
C+	03	16 C-
E5V	04	17 EGND
2A+	05	18 2A-
2B+	06	19 2B-
2C+	07	20 2C-
E5V	08	21 EGND
3A+	09	22 3A-
3B+	10	23 3B-
3C+	11	24 3C-
E5V	12	25 EGND
EGND	13	

25-pin Female D-Sub Connector

Wire Connections



Accessories

DN-25 CR

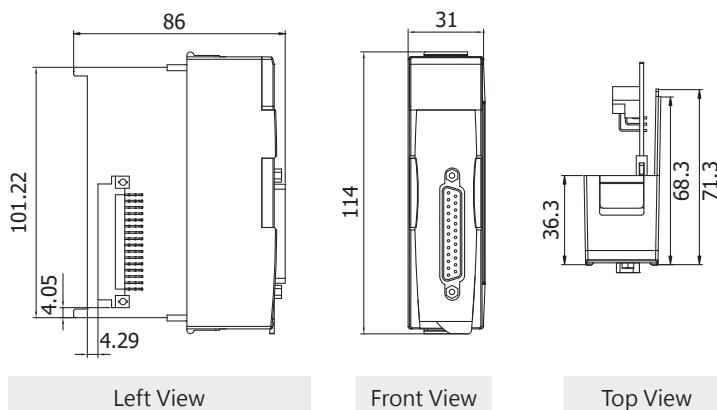


25/9 pin D-sub I/O Connector Block (Pitch = 5.08 mm) with DIN-rail Mounting (RoHS)

Include:

CA-0920 (DB9 (Male) to DB9 (Male) Cable [RS-232; Pin1-Pin9], 2 M) and CA-2520 (DB25 Male to Male, 45°, 2 M)

Dimensions (Units: mm)



Ordering Information

I-8090W-G CR

3-axis Encoder Module (RoHS)
Includes CA-PC25M (DB25 connector Male with plastic cover)
(Only suitable for iPAC-8000 and ISaGRAF PAC)