



I-8090W-G

3-axis Encoder Module
(Only suitable for iPAC-8000 and ISaGRAF PAC)

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 V_{rms} 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.

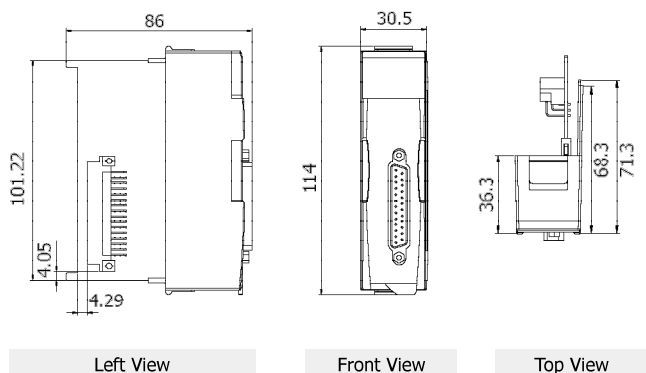
System Specifications

LED Indicators/Display	
System LED Indicators	1 as Powe Indicator
I/O LED Indicators	8 as Status Indicator
Isolation	
Intra-module Isolation, Field-to-Logic	2500 V _{rms}
EMS Protection	
ESD (IEC 61000-4-2)	±4 kV Contact for each Terminal
Power	
Power Consumption	3.4 W max.
Mechanical	
Dimensions (W × L × H)	30.5 mm × 86 mm × 114 mm
Environment	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 90% RH, Non-condensing

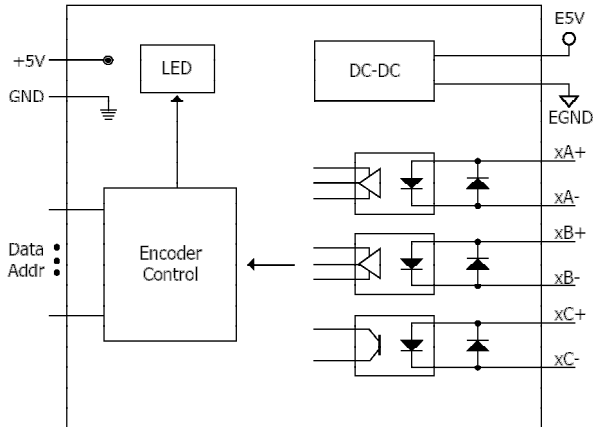
I/O Specifications

Encoder Input	
Input Axis	3-axis
Encoder Counter	16-bit (32-bit encoder counter by software)
Counting Mode	1. Quadrant Counting 2. CW/CCW 3. Pulse/Dir
Maximum Counting Rate	1 MHz

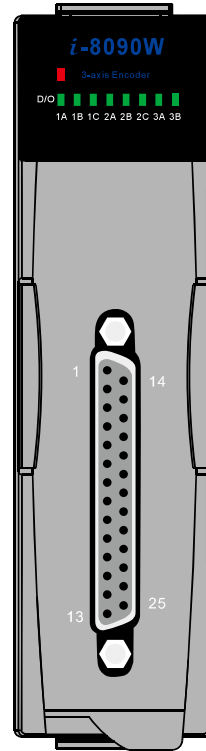
Dimensions (Units: mm)



Internal I/O Structure



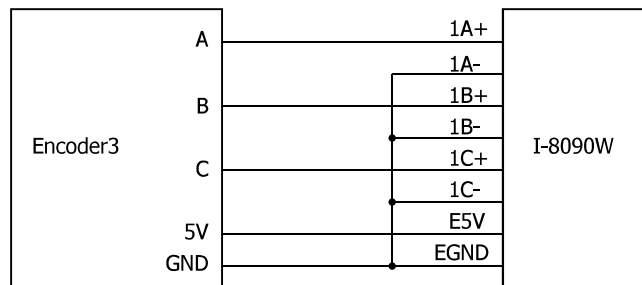
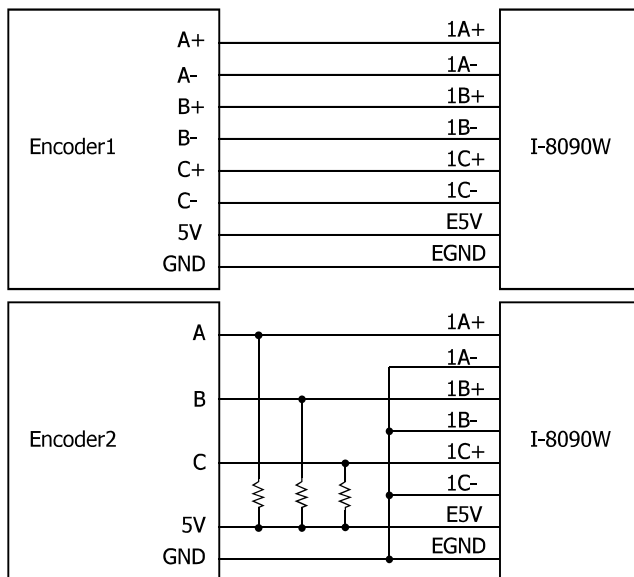
Pin Assignments



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



Ordering Information

I-8090W-G CR	3-axis Encoder Module (Gray Cover) (RoHS)
Standard Pack	I-8090W x 1, User's Manual x 1, CA-PC25M x 1

CA-PC25M

25-pin Male D-Sub connector with plastic cover Connector