

I-8092F-G

High-speed 2-axis Motion Control Module with FRnet Master

Features

- Independent 2-axis motion control
- Support for hand wheel and jog functions
- 2-axis linear / 2-axis circular interpolation function
- Continuous interpolation function
- Programmable T/S-curve acceleration and deceleration
- A maximum pulse output rate of 4 Mpps for each axis
- Pulse Output Types: CW/CCW or PULSE/DIR
- 32-bit encoder counter for each axis
- Encoder Pulse Input Types: A/B Phase or Up/Down
- Programmable automatic homing for each axis
- Programmable software limits
- Expandable Remote I/O:
  128 DI and 128 DO via a two-wire FRnet interface

Introduction

The I-8092F is a 2-axis stepping/pulse-type servo motor control module that can be used on any of the ICP DAS I-8000 and PAC series controllers, and is suitable for general-purpose motion control applications. The I-8092F is equipped with one FRnet master, which allows fast remote I/O to be easily expanded. The two-wire FRnet interface can be used automatically scan its 128 DI and 128 DO channels with a scan period of 2.88 ms.

In addition to its wide speed range, this intelligent motion controller also has a variety of motion control functions built in, such as 2-axis linear interpolation, 2-axis circular interpolation, T/S-curve acceleration/deceleration, and others. A major advantage is that the majority of the I-8092F motion control functions are performed by the high-performance motion ASIC with little load on the processor. While driving the motors, the motion status, and the status of the other I/O channels on the I-8000 or PAC modules, can still be monitored.

As a result of the low CPU loading requirements of the I-8092F, one or more motion modules may be used on a single I-8000 or PAC controller. ICP DAS provides a wide range of functions and examples that can be used to reduce the need for programming by users, making it a highly cost-effective solution for motion control application developers.

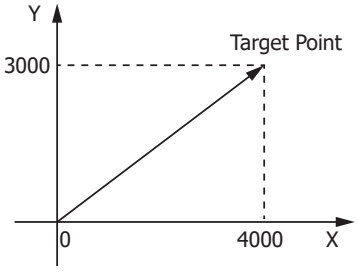
Specifications

Model	I-8092F-G
Software	
Development	Visual C++ lib/DLL C#, VB.Net DLL Visual Basic 6.0
Utility	EzGo Utility
Hardware	
Connector	37-pin D-sub
General	
No. of Axes	2
Operation Mode	Semi-closed Loop
Synchronous Action	-
Speed Profile	T/S curve
Position Control Mode	Incremental mode
Command Type	Pulse command
Axis I/O	
Servo Interface Output	SVON
Mechanical Switch Input	Home, LMT+/-, NHOME, EMG
Servo Interface Input	INP, ALM
Encoder Input	
Ring Counter Mode	32-bit
Mode	A/B Phase, Up/Down

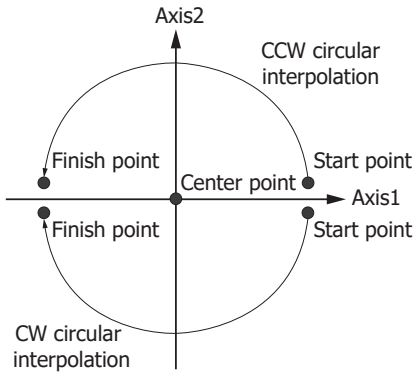
Model	I-8092F-G
Counting Rate	4 MHz (Max.)
Counter Width	32-bit
Pulse Output	
Mode	CW/CCW, PULSE/DIR
Counter Width	32-bit
Rate	4 MHz (Max.)
Interpolation	
Cicular	2 axes
Linear	2 axes
Digital Input	
Channels	Expandable: 128 DI
Isolation (with DN-8237)	2500 Vrms optical isolation
Digital Output	
Channels	Expandable: 128 DO
Isolation (with DN-8237)	2500 Vrms optical isolation
Power	
Consumption	+5 V @ 500 mA
Environment	
Operating Temperature	-20 ~ +75°C
Storage Temperature	-30 ~ +85°C
Humidity	10 ~ 90% RH, Non-condensing

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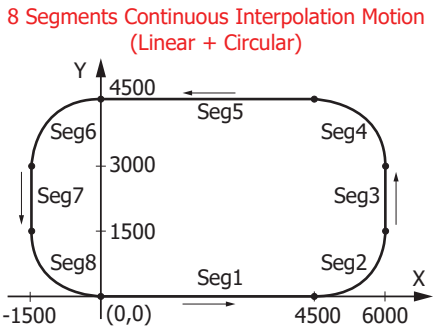
Features of Motion Function



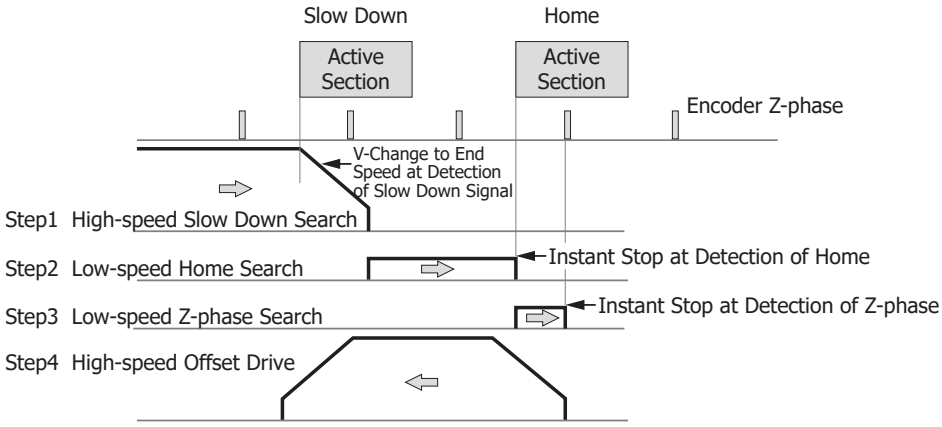
2-Axis Linear Interpolation



2-Axis Circular Interpolation



Continuous Interpolation



4 Steps Automatic Home Searching

Ordering Information

I-8092F-G	High-speed 2-axis Motion Control Module with FRnet Master

Accessories

DN-8237UB	Photo-isolated Universal Snap-on Wiring Terminal Board
DN-8237GB	Photo-isolated General Purpose Wiring Terminal Board
DN-8237MB	Photo-isolated Snap-on Wiring Terminal Board for Mitsubishi MELSERVO-J2 Servo Amplifier
DN-8237PB	Photo-isolated Snap-on Wiring Terminal Board for Panasonic MINAS A4/A5 Servo Amplifier
DN-8237YB	Photo-isolated Snap-on Wiring Terminal Board for Yaskawa Sigma II/III/V Servo Amplifier
DN-8237DB	Photo-isolated Snap-on Wiring Terminal Board for Delta ASDA-A Servo Amplifier
CA-3715DM-H CA-3730DM-H CA-3750DM-H	37-pin D-Sub Male-Male Cable for Terminal Board (180°), Length 1.5 M / 3.0 M / 5.0 M

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