Multi-axis Motion Modules for PAC

1-8092F-G High Speed 2-Axis Motion Control Module with FRnet master



Advantages & Features:

- Support for hand wheel and jog functions
- 4-steps home modes with auto searching
- 2-axes linear interpolation function
- 2-axes circular interpolation function
- Programmable T/S-curve acceleration and deceleration
- Programmable ring counter
- Work on a PAC: Wincon & I-8000
- Expandable distributed I/O: 128 DI & 128 DO Via twowired FRnet interface.



- X-Y-Z Table
- Fix-Pitch Stamping Machine
- Transfer Machine
- Spinner
- Load/Unload















Introduction:

The i-8092F is a 2-axis pulse-type stepping/servo motor control module that can be used on any of the ICP DAS I- 8000 and Wincon series controllers, and is suitable for general-purpose motion applications. It is a module that has full functions of i-8092 plus one port of FRnet. The FRnet port allows this module to expand its fast remote I/O easily. This two-wired FRnet can automatically scan its 128 DI and 128 DO with a period of 2.88 ms. This module contains a high-performance motion ASIC. Apart from a wide range of speed, this intelligent motion controller also has a variety of built-in motion control functions, such as 2-axes linear interpolation, 2-axes circular interpolation, T/S-curve acceleration/deceleration, and so on. In addition, most of the i-8092F motion control functions are performed with little load on the processor. While driving the motors, the motion status, and the other I/O status on the i-8000 or Wincon 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 Wincon controller. ICP DAS has also provided a wide range of functions and examples to reduce the need for programming by users, making it a highly cost-effective solution for motion builders.

Specifications:

- 2-Axis Motion Control
- Maximum Pulse output frequency 4Mpps
- 32-bits up/down counter range
- -2,147,483,648 ~ +2,147,483,647

 Acceleration/deceleration range
- 125 1 × 10.06 PPS/S : 62 5×10.0
 - 125 ~ 1 x 10^6 PPS/S ; 62.5x10^3 ~ 500 x 10^6 PPS/S
- ▶ Input/Output Signals for each axis
- ➡ All I/O signal are optically isolated 2500Vrms
- Command Pulse output pins ±N and ±P
- Encoder signals input pins ±A and ±B
- Mechanical signal input pins ±LMT, HOME and NHOME
- Servo-motor interface I/O pins
 INP. ALAM and SRV ON Servo ON
- INP, ALAW and SRV_ON Servo ON
- Manual pulse generator signal input pin ±EXP
 Connectors 68-pins SCSI-type connector
- Operating Temp -20 ~ + 75
- Storage Temp -30 ~ +85
- Operating Humidity 10 ~ 85% non-condensing
- Storage Humidity 5 ~ 90% non-condensing
- External Power supply (Input) 24V DC (connect to terminal board)

Software support:

- Development software: Win CE EVC/VC.net/VB.net
- MiniOS7 TC3.0/MSC/BC3.0
- EzGo assists the motion system developer to debug any wiring problem, and provides the programming code.
- FRNet I/O Tool EzConfig

Ordering Information:

Model No.	Product Description
I-8092F-G	2-axis motion control module
DN-8237GB	The daughter board for General Purpose
DN-8237DB	The daughter board for Delta ASDA A Amplifier.
DN-8237MB	The daughter board for Mitsubishi J2S Amplifier.
DN-8237PB	The daughter board for Panasonic MINAS A Amplifier.
DN-8237YB	The daughter board for Yaskawa Sigma II Amplifier.
CA-3710	Male D-sub cable 1M, Cable for Daughter Board (45°)
CA-3720	Male D-sub cable 2M, Cable for Daughter Board (45°)
CA-3710DM	Male D-sub cable 1M, Cable for Daughter Board(180°)
CA-3730DM	Male D-sub cable 3M, Cable for Daughter Board(180°)
CA-3750DM	Male D-sub cable 5M, Cable for Daughter Board(180°)
4PCA-2P4C-0100	The cable for FRNet modules; Length:100m

Note: You may choose these terminal boards depending on your original motors and drivers. Moreover, we also provide plenty of cables for you. Please see the last chapter-Accessories.