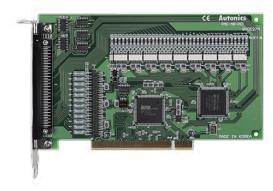
4 axis Board Type Motion Controller



PMC-4B-PCI Series

CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- Independent 4-axis control of AC servo motors and stepper motors
- PC-PCI card type
- Auto home search function and synchronous operation
- Interpolation control for circular, linear, bit pattern, continuous, acceleration, and deceleration drives.
- 2-axis/3-axis constant linear velocity
- Supports Windows 98, NT, 2000, XP, Windows 7
- Labview library and help, and C language library and samples available on www.autonics.com

Product Components

Product

• Instruction manual

Software

 $\label{thm:continuous} Download the installation file and the manuals from the Autonics website.$

atMotion

The program allows to manage the motor driver's parameter setting and monitoring data.

Specifications	
Model	PMC-4B-PCI
Power supply	5 VDC== ± 10% (using PC internal power)
External power supply	12 - 24 VDC== ± 10%
Control axes	4 axis
CPU data bus	8 / 16 bit selection
Ambient temp.	0 to 45°C, storage: -10 to 55°C (no freezing or condensation)
Ambient humi.	35 to 85%RH, storage: 35 to 85%RH (no freezing or condensation)
Approval	C € IS ERI
Unit weight (packaged)	≈ 100.4 g (≈ 654.4 g)
2/3 axis linear interpolation range	-2,147,483,648 to +2,147,483,647 for each axis
2/3 axis linear interpolation speed	1 pps to 4 Mpps
2/3 axis linear interpolation position accuracy	$\leq \pm 0.5$ LBS (within all interpolation range)
2/3 axis bit pattern interpolation speed	1 pps to 4 Mpps (depending on CPU data setup time)
Circular interpolation range	-2,147,483,648 to +2,147,483,647 for each axis
Circular interpolation speed	1 pps to 4 Mpps
Circular interpolation position accuracy	≤ ±1 LBS (within all interpolation range)
Other interpolation function	Select specific axis, constant linear velocity, continuous interpolation step transmission (command, external signal)
Encoder input pulse	2-phase pulse / up down pulse input, 2-phase pulse 1 / 2 / 4-multiply selection
Logic pos. counter range	-2,147,483,648 to +2,147,483,647 (for output pulse)
Actual pos. counter range	-2,147,483,648 to +2,147,483,647 (for input pulse)
Compare register	Comp. ±register pos. comparison range: -2,147,483,648 to +2,147,483,648 to utput when the current counter value and the user position counter are same Software limit operation
Auto home search	High speed near home search (step1) → Low speed near home search (step2)
Interrupt function (except interpolation)	1 drive pulse output: when changing position counter ≥ Comp, when changing position counter ≥ Comp.+, when changing position counter < Comp, when changing position counter < Comp.+, when starting constant speed in accel/decel drive, when ending constant speed in accel/decel drive, when ending drive auto home search, when ending auto home search, when inning synchronous operation
Drive control by external signal	± direction fixed/continuous pulse drive by EXP+, EXP- signal 2-phase encoder signal mode (encoder input) drive
External deceleration stop / immediate stop signal	IN 0 to 3 each axis 4 point Select signal valid/invalid and logic level selection, use general inpu
Servo motor input signal General output signal	Select alarm, INPOS signal valid/invalid and logic level OUT4 to 7 each axis 4 point (both drive status output signal and
<u> </u>	terminal)
Drive status signal output	ASND (while acceleration), DSND (while deceleration)
Overrun limit signal input	Select +direction, -direction each 1 point and logic level Select stop/deceleration stop at active
Emergency stop signal input	EMG 1 point, stop drive pulse for all axes by low level
Integral filter	Built-in integral filter at each input signal input terminal, pass time type) selection
	Select specific axis, constant linear velocity, continuous interpolation

Dimensions

• Unit: mm, For the detailed drawings, follow the Autonics website.

