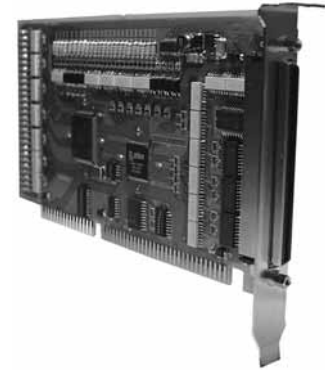


# PMC-2B-ISA

## 2-Axis board type programmable motion controller

### ■ Features

- Available to control 2-axis independent AC servo motor and stepping motor
- PC-ISA Type Card
- Interpolation on circular/linear, bit pattern/continuous/ac • deceleration drive
- Output pulse Max. 4Mpps
- Countable and comparable the real position
- Compatible with Windows 98, NT, 2000, XP
- Apply the library which can be operated in C++

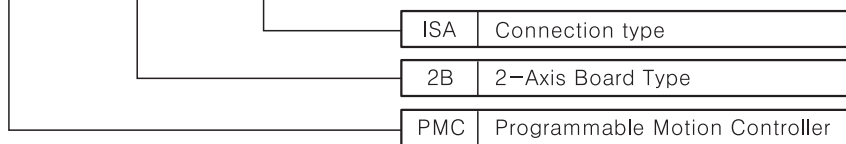


**⚠ Please read "Caution for your safety" in operation manual before using.**



### ■ Ordering information

**PMC - 2B - ISA**



### ■ Specifications

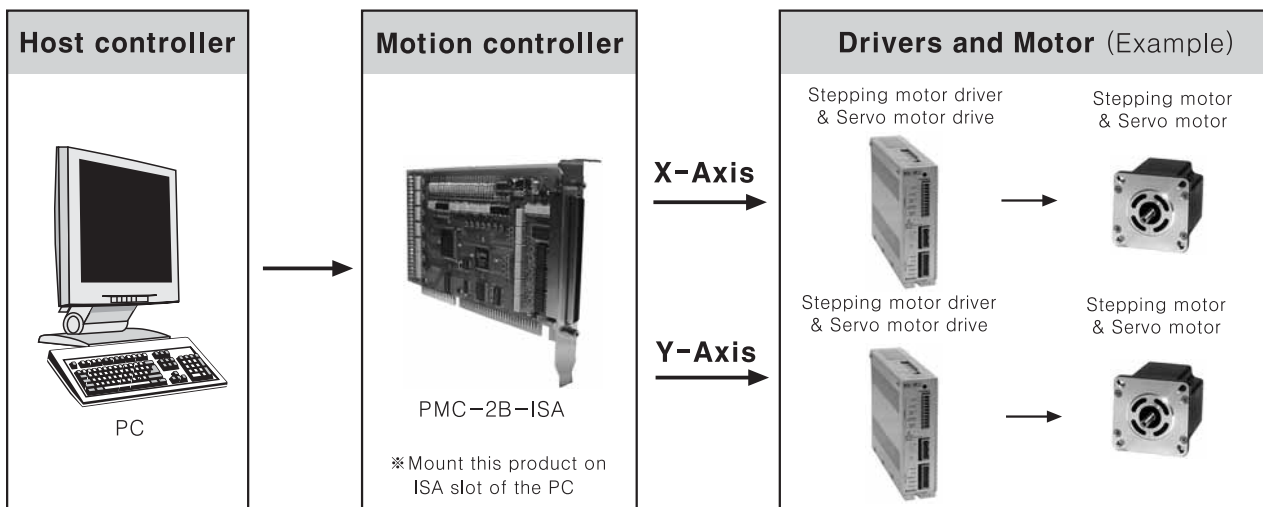
Model	<b>PMC-2B-ISA</b>
Control axis	2-Axis
ISA bus interface	Data bit width : 16 bit
	I/O possession address : 16 bit
	Interrupt : Available to connect IRQ 3, 4, 5, 6, 7, 10, 11, 12, 14, 15
Shortcut function	2-Axis linear interpolation
	Interpolation function : Axis -8,388,607 ~ +8,388,607
	Interpolation speed : 1 ~ 4 MPPS
	Interpolation position accuracy : Max. ±0.5LSB(Within the whole interpolation range)
	Circular interpolation
	Interpolation range : Axis -8,388,607 ~ +8,388,607
Interpolation speed : 1 ~ 4 MPPS	
Interpolation position accuracy : Max. ±1 LSB(In interpolation range)	
2-Axis bit pattern interpolation	Interpolation speed : 1~4MPPS(Dependent only on CPU data setup)
Etc.	Constant linear speed, Continual interpolation, Transmit interpolation STEP(Command, External signal)
Driver pulse output (X, Y common specifications)	Output circuit : Differential operating Line driver output
	Output speed range : 1PPS~4MPPS
	Output speed accuracy : Max ±0.1%(For setting value)
	Speed rate : 1 ~ 500
	S-curve ac.acceleration ascend rate : 954 ~ 62.5×10 <sup>3</sup> PPS/SEC (At rate=1) (Rate of increase) 477×10 <sup>3</sup> ~ 31.25×10 <sup>6</sup> PPS/SEC <sup>2</sup> (At rate=500)
	Ac.acceleration rate : 125 ~ 1×10 <sup>6</sup> PPS/SEC <sup>2</sup> (At rate=1) 62.5×10 <sup>3</sup> ~ 500×10 <sup>6</sup> PPS/SEC <sup>2</sup> (At rate=500)
	Super high speed : 1 ~ 8,000PPS (At rate=1) 500 ~ 4×10 <sup>6</sup> PPS/SEC <sup>2</sup> (At rate=500)
	Drive speed : 1 ~ 8,000PPS (At rate=1) 500 ~ 4×10 <sup>6</sup> PPS/SEC <sup>2</sup> (At rate=500)
	Output pulse : 0 ~ 268,435,455(Fixed quantity drive)
	Speed curve:Constant speed/Linear ac.acceleration speed /Parabola S-curve ac.acceleration speed drive
	Decelerate mode of fixed drive / Manual deceleration
	Output pulse on Driving, Available to change drive speed
	Selectable dependent 2pulse / 1pulse direction type
	Selectable logic level

# 2-Axis Motion Controller

## ■ Specifications

Encoder input pulse	Input circuit: High speed photo-coupler input, Able to connect with differential operating line drive 2phase pulse (Up/Down pulse input)
Direction counter	Logic position counter (For output pulse) count range : -2,147,483,648 ~ +2,147,483,647 Real position counter (For input pulse) count range : -2,147,483,648 ~ +2,147,483,647
Compare register	COMP+ register position compare range : -2,147,483,648 ~ +2,147,483,647
	COMP- register position compare range : -2,147,483,648 ~ +2,147,483,647
	Status output and signal output the magnitude with position counter Available operating as a software limit
Interrupt function (Except for interpolation)	<ul style="list-style-type: none"> <li>• 1 drive pulse output</li> <li>• On changing position counter <math>\geq</math> COMP+</li> <li>• On changing position counter <math>&lt;</math> COMP+</li> <li>• On changing position counter <math>&lt;</math> COMP-</li> <li>• On changing position counter <math>&lt;</math> COMP-</li> <li>• Starting fixed speed on ac.deceleration drive</li> <li>• On drive ending</li> </ul>
Drive shortcut by external signal	Able to drive fixed quantity • continual speed of +/- direction by EXPP, EXPM signal Input circuit : Photo-coupler + Integral filter circuit, Able to connect mechanical contact
E decelerate stop / Immediate stop signal	INO ~ 2square axis 3points Input circuit : Photo-coupler + Integral filter circuit
Input signal for servo motor	ALARM (alarm), INPOS (Complete position set) Input circuit : Photo-coupler + CR integral filter circuit
Output signal for common	OUT0 ~ 5square axis 6points (Multiple 4 combines MULT CHIP shortcut signal and terminal)
	OUT0 ~ 7square axis 8points (Dual purpose of driver status output signal and terminal) Output circuit : Open collector output
Signal output on drive	<ul style="list-style-type: none"> <li>• DRIVE (Driver pulse output)</li> <li>• ASND (Ascend speed) CNST (Constant speed) DSND (Descend speed)</li> <li>• CMPP (Position <math>\geq</math> COMP+), CMPM (Position <math>&lt;</math> COMP-)</li> <li>• ACASND (Accelerated ascend speed), ACDSND (Accelerated descend)</li> </ul>
Overrun limit signal input	Direction +, - each one Input circuit: Photo-coupler + CR integral filter circuit
Emergency stop signal input	ENGN 1point in all axis, make drive pulse of all axis immediately stop Input circuit : Photo-coupler + CR integral filter circuit
Etc.	Operating temp. range : 0 ~ 45°C (Non-freezing and non-dew condition)
	Power supply : 5DCV $\pm$ 5% (Max. Current consumption 700mA)

## ■ System



(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

(P) Production stoppage models & replacement