

# AX

## ROBOT CONTROLLER

### Nachi AX PC-Based Robot Controller

Our latest high-performance, multi-tasking controller features hardware and software enhancements resulting in shorter cycle times. Programming is fast and flexible with additional options available through the teach pendant. With the internal manual/diagnostic function, maintenance can be done from a remote location. The AX also complies to international standard safety circuits for security you can count on.

### Control Features

- 50mm short pitch move - 30% faster
- International standard safety circuit
- High-speed interference detection
- Fully digital drive with high-speed DSP motion control
- Simplified maintenance

### Enhanced Software

- Real time operating system (RTOS) plus embedded WindowsNT®
- Improved robot motion
- Easy tools to develop and validate robot programs
- Software PLC directly controls peripherals
- Offline programming
- Visual maintenance with online manual

### Teach Pendant

- Easy to operate - ergonomic design
- Enhanced color graphic Windows® display
- Pendant display functions can be customized
- Optional digital touch screen



### Applications

Used on all Nachi robot products

### Open Concept

- Extends to industry standard bus (ISA/PCI)
- Supports Windows® applications (with extra printed circuit board)





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<b>Features</b>	
Controlled Axes	Simultaneous 6 axes (standard), additional 12 axes optional
Memory Capacity	160,000 robot program points
Memory	Flash memory
External Storage Device I/F	Compact flash card I/F
Positioning Device	Absolute encoder
Drive System	Fully digital with DSP control AC Servo motors
<b>Control Cabinet</b>	
Unit	Free standing, NEMA 12
Dimensions	Height: 1,180 mm Width: 600 mm Depth: 550 mm
Weight	192 kg
<b>Programming Features</b>	
Program Selection	9999 programs (BCD)
Programming	ICON and menu driven
Display Unit	Interactive teach pendant Windows®-style interface User programmable menu display Color graphic display with fine resolution (6.5" 640 x 480)
Language	SLIM (robot language)
System Software	Flash ROM
Application Software	Spot weld, seal, spray, arc, palletize, and more Integrated spot (Nachi or Medar) Integrated arc (Nachi)
Additional Features	User macros User coordinates Multi-robot control Internal electronic manual/diagnostic function
<b>Equipment Interface</b>	
Interface	RS232C/Ethernet (10 Base T)
Input/Output (Standard)	32 inputs DC24V 32 outputs DC24V
(Optional)	64 inputs DC24V 64 outputs DC24V 120 VAC capabilities expandable up to 40 inputs/outputs
Input/Output (Optional)	AB RIO Node adapter (full rack)
Field Bus (Max 4ch)	Device Net, profibus, and others supported
Analog Signal	Input: 2 channels Output: 3 channels
Conveyor Pulse Counter	2 channels
Additional Features	ISA, PCI bus
Power Supply	(Standard) 480 VAC ±10%, 3 Phase, 50 or 60 Hz (Optional) 575 VAC ±10%, 3 Phase, 50 or 60 Hz (Canada) Others available
<b>Environmental</b>	
Ambient Temperature Rating	0 to 45 degrees C
Ambient Humidity	20 to 85% RH
Cooling Method	Heat exchanger

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