

## Nachi AX PC Based Robot Controller

AX Robot controller is the latest innovation by Nachi which is armed with an array of software and hardware for increased performance and reduced maintenance. AX controller runs on Windows® NT embedded† which enables it to support multi tasking and easy windows based graphical user interface. Programming is fast and made easy by numerous options available through teach pendant. AX controller is truly a new generation robot controller which supports features like cooperative motion capability††, remote maintenance and monitoring, support for various applications and inbuilt maintenance function to help the customer with maintenance and troubleshooting.

## Control Features

- 50 mm short pitch movement - 30% faster
- International standard safety circuit
- High speed interference detection
- Fully digital drive with high speed DSP motion control
- Simplified maintenance
- Supports circular interpolation too
- Cooperative motion capability

## Enhanced Software Features

- Real time operating system based on Windows® NT Embedded.
- Improved robot motions
- Easy tools to develop and validate robot programs
- Software PLC directly controls external peripherals.
- Offline programming support.
- Visual maintenance function helps user with online electronic manual.

## Teach Pendant

- Easy to use - ergonomic design.
- Enhanced colour graphic Windows® display.
- Function displays can be customised in any order by the user.
- Touch screen (optional)
- Deadman switch double setting (optional) available.

## Open Concept

- Extends to industry standard bus (ISA/PCI)
- Supports Windows® applications (additional board required).



†Windows® NT Embedded is a new version of Windows® NT® operating system with specifically designed to address the needs of dedicated and embedded OEMs.

††With cooperative motion capability, two robots can, for example manipulate a large object simultaneously.

## Specification Table

<b>Features</b>	
Controlled Axes	Simultaneous 6 axes (standard), additional 12axes optional
Memory Capacity	160,000 robot program points
Memory Type	Flash memory
External Storage Device I/F	Compact Flash Card interface
Positioning Device	Absolute Encoder
Drive System	Fully digital with DSP controlled 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	Teach and Playback ; program using robot language and recorded points
Robot Language Supported	SLIM
Display Unit	Windows® style GUI User programmable menu display Colour graphics with fine resolution ( 6.5" display unit with 640X480 resolution)
System Software	Based in Flash ROM along with Windows® NT® embedded OS
Application Software	Additional customized software support for Spot Welding, Sealing, Spray painting, Arc Welding, Palletizing and other applications. Integrated Spot (Nachi or Medar) Integrated Arc (Nachi)
Additional Features	User macros, User co-ordinates, Multi robot control and E manuals for maintenance support
<b>Equipment Interface</b>	
Interface	RS232C/Ethernet (10 Base T)
Inputs / Outputs (Standard)	32 inputs DC 24 V ; 32 outputs DC 24 V
(Optional)	64 inputs DC 24 V ; 64 outputs DC 24 V 120 VAC capabilities expandable upto 40 inputs/outputs
Inputs / Outputs (Optional)	AB RIO Node adapter (full rack)
Field Bus (Max 4 Channels)	Device Net, Profibus and others supported
Analog Signal	Input : 2 channels ; Output : 3 channels
Additional Features	ISA, PCI bus
<b>Power Supply</b>	
Standard	480 VAC ±10%, 3 Phase, 50 or 60 Hz
Optional	575 VAC ±10%, 3 Phase, 50 or 60 Hz Other available
<b>Environment</b>	
Ambient Temperature Rating	0 to 45 degrees C
Ambient Humidity	20 to 85% RH
Cooling Method	Heat Exchanger

‡ Nachi Australia reserves the right to change specifications without notice.

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