

# SYSTEM R-J3iB Controller™

## Basic Description

Fanuc Robotics' System R-J3iB Controller uses advanced technology packaged in a proven, reliable and efficient controller design. Process capability and open architecture features provide intelligence to improve application and motion performance while simplifying system integration. SYSTEM R-J3iB Controller incorporates FANUC Robotics' unique "plug-in options" concept, which allows flexibility for application specific configurations while maintaining a commonality for all users of the system.

## Hardware Features/Benefits

- Use of surface mounting and 3-D packaging reduces components and increases reliability.
- Multi-processor architecture permits concurrent operations, reduces program execution times and increases path accuracy.
- Quick change servo amplifier improves maintainability and controller uptime.
- Distributed and network I/O options reduce system and integration costs and simplify troubleshooting.
- Provides extensive line of compact I/O modules for both digital and analog signals.
- Allows for fast power-up and program execution with auto resume, which increases overall uptime.



## System Features/Benefits

- CE safety circuits standard
- Ergonomically designed, lightweight teach pendant with large, easy-to-read backlit LCD display
- High-speed, precision control of up to 16 axes of motion
- Multi-tasking operating system allows execution of several concurrent user programs.
- Advanced storage, communications and networking capabilities include built-in Ethernet and PCMCIA interfaces.

## Process Features/Benefits

- AccuPath provides enhanced path tracking during linear and circular motion while minimizing speed variations.

- Collision detection minimizes potential damage to the robot or end-of-arm tooling.
- Coordinated motion simplifies the teaching of part programs on a moving table or positioner.
- TurboMove provides minimal cycle time by computing robot dynamics in real-time.
- Auxiliary axes options can support up to five separate motion groups, each with its own control program and simple kinematic models.

P e r p e t u a l M o t i o n  
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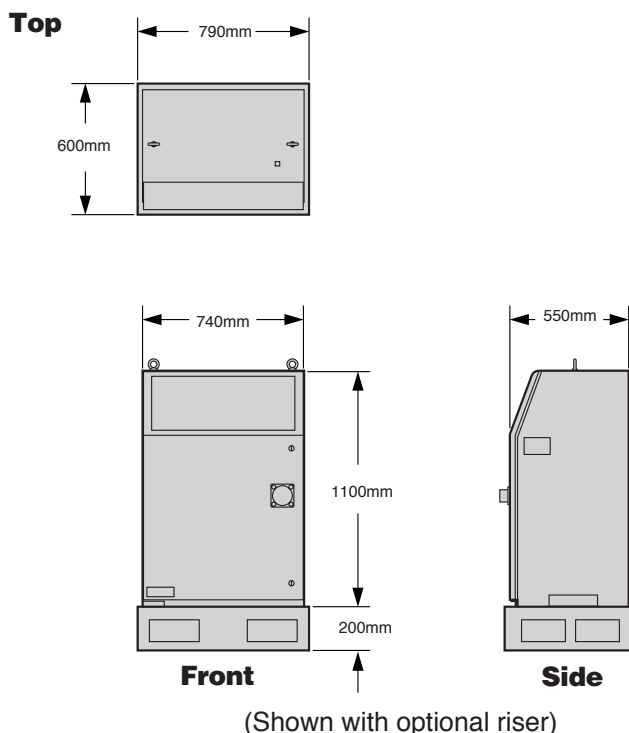
## R-J3iB Standard Hardware Features

Items	Specifications
<b>B-size cabinet</b>	See drawing for dimensions
<b>Operating environment</b>	- Ambient temperature: 0-45°C (standard) - Humidity: 75% RH or less non-condensing (95% max) - Vibration: 0.5G or less
<b>Power supply</b>	- Three phase 200-575 VAC +10%,-15%, 50/60Hz ±1Hz with circuit breaker
<b>CPU</b>	- Multi-processor architecture (separate motion and communication) with real-time clock/calendar
<b>Controlled axes</b>	- 16 (up to five motion groups)
<b>Serial/host-communications</b>	- Built-in Ethernet 100 Base-TX/10 Base-T with RJ-45 connector - Three RS-232 ports (one can be configured as RS-422)
<b>Teach pendant</b>	Back-lit LCD, multi-function

## R-J3iB Options

Items	Specifications
<b>I/O sub-systems</b>	- Model A (modular rack mounted - 5 or 10 slots) - Model B (distributed DIN rail mounted) - FANUC I/O link
<b>I/O types</b>	- DI/DO: 512 point maximum each (includes process I/O) - Digital AC or DC input modules - Digital AC or DC output modules - 12-bit Analog input or output modules
<b>Process I/O</b>	- Digital input: 40 points maximum - Digital output: 40 points maximum - Multiple points can be utilized as a code (group I/O) - Analog inputs: 6 points - Analog outputs: 2 points - Digital input for welding: 8 points - Digital output for welding: 8 points - Wire stick detect
<b>Remote I/O sub-systems</b>	- Allen Bradley Remote I/O - Genius I/O - DeviceNet - Profibus DP - ControlNet - Interbus - FIP I/O
<b>Memory card for system software installation or program backups</b>	- PCMCIA type 2 interface for: ATA flash disk cards (SanDisk compatible)
<b>Host communications (Ethernet-based)</b>	- PC Interface: enables PC application communication
<b>Integrated PMC</b>	- Ladder logic control for peripheral devices
<b>i-pendant</b>	- A color, Internet-ready teach pendant

## Standard B-size Cabinet



## Operator Panel



## i-Pendant



**Note:** Dimensions are shown in millimeters.

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