

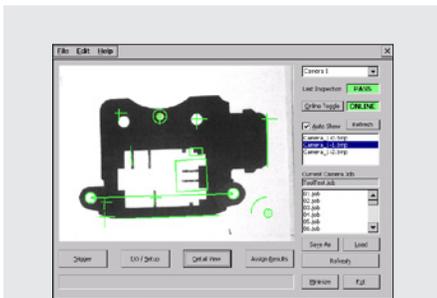


FS100

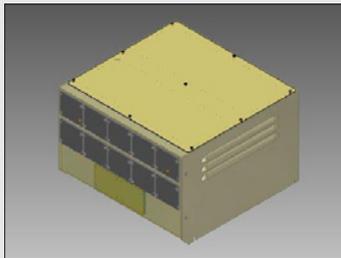
ROBOT/SYSTEM CONTROLLER

Our newest controller is small, powerful and open. Designed for packaging, small parts handling and assembly applications, it has the performance required for high speed, discrete operations. It also has open software architecture to enable OEMs, machine builders and system integrators to develop their own customized software solutions.

Designed for Motoman® robots with payloads of 20 kg and under.



MOTOSIGHT 2D COMPATIBLE



TOP HAT COVER (OPTIONAL)

TOP REASONS TO BUY

- Powerful controller for high-performance applications
- Open software architecture and open communications
- Small footprint saves space
- Energy savings
- Compliant to safety standards

HIGHLIGHTS

Powerful

- 2-4 times faster than DX100 controller.
- Designed for packaging and small parts handling robots with payloads of 20 kg and under.
- Compatible with integrated MotoSight™ 2D vision (optional).
- Improved communication speeds and functionality.
- High-speed I/O response and high-resolution timers.
- Supports a wide range of communication networks.
- External axis support:

Robot Axes	External Axes Available
4	one or two
5	one or two
6	one or two
7	one
15	one

- Inputs can be used with either NPN or PNP devices. NPN outputs are standard, but can be changed to PNP if desired.

Open Software

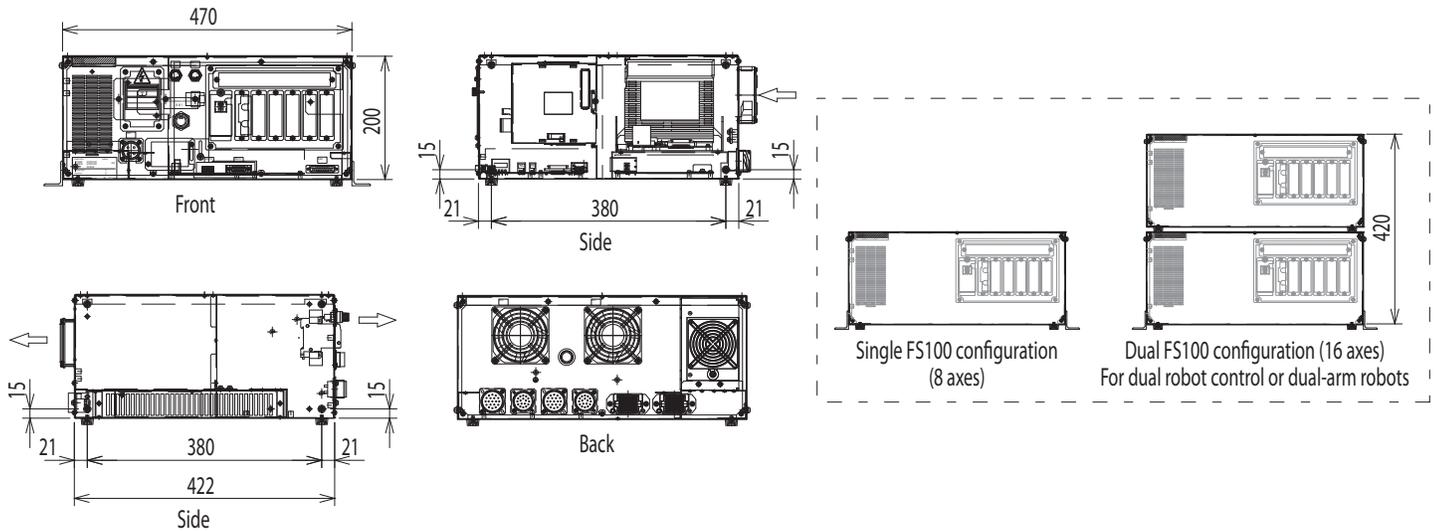
- Open architecture enables software customization in widely accepted environments such as C, C++, C# and .NET.
- Supports optional MotoPlus™ and MotomanSync™ software environments.
- Uses same programming pendant hardware as DX100 controller, providing a consistent programming interface with current products.
- Supports customization of programming pendant screens using C++ and C#.

Available Robot Models

- MHJF
- MH5F
- MH5LF
- MH6F
- MH6F-10
- HP20F
- MPP3
- MPK2F
- SIA5F
- SIA10F
- SIA20F
- SDA5F*
- SDA10F*
- SDA20F*

* Requires dual-size controller

DRAWINGS



FS100 CONTROLLER SPECIFICATIONS	
Nominal Dimensions (mm)*	Single Controller: 470 mm (w) x 200 mm (h) x 420 mm (d) (18.5" x 7.9" x 16.5") Dual Controller: 470 mm (w) x 420 mm (h) x 420 mm (d) (18.5" x 16.5" x 16.5")
Approximate Mass	Single Controller: 20 kg (44.1 lbs) Dual Controller: 48 kg (106 lbs)
Cooling System	Direct cooling
Ambient Temperature	During operation: 0° to 40° C (32° to 104° F) During transit and storage: -10° to 60° C (14° to 140° F)
Relative Humidity	90% max. non-condensing
Primary Power Requirements	Single-phase or 3-phase power, 200/230 VAC at 50/60 Hz Heavy duty cycle external axis use may require 3-phase power (MPP3, MPK2, MH6F, MH6F-10, HP20F require 3-phase)
External Transformer (optional)	For 480/575 VAC installations
Digital I/O	System I/O: 12 inputs/12 outputs User I/O: 16 inputs/16 outputs Max. I/O (optional): 156 inputs and 156 outputs
Position Feedback	Absolute encoder
Program Memory	JOB: 10,000 steps, 1,000 instructions CIO Ladder: 1,500 steps
Number of Robots/Axes	Up to 2 robots, 16 axes maximum
Multi Tasking	Up to 6 concurrent jobs, 1 system job
Fieldbus	All common networks supported
Ethernet	10 Base T/100 Base TX
Safety	Dual-channel Emergency Stop Pushbuttons, 3-position Enable Switch, Manual Brake Release
Cabinet Rating	IP20

* There is not sufficient space inside the FS100 controller to mount electrical breakout cards, power supplies or other electrical devices. During assembly, these components will be mounted to the top of the FS100 on a bracket, but can be removed and located elsewhere if desired. If it's desired keep these interfaces mounted to the top of the controller, the top hat cover option should be used which adds 293 mm (11.5") to the height of the controller.

Note: Use DX100 controller for arc welding applications.

FS100 PENDANT SPECIFICATIONS	
Pendant Dimensions (mm)	169 (w) x 314.5 (h) x 50 (d) (6.7" x 12.4" x 2")
Pendant Weight	.998 kg (2.2 lbs)
Interface	One Compact Flash slot; One USB port (1.1)
Pendant Playback Buttons	Teach/Play/Remote Keyswitch selector Servo On, Start, Hold, and Emergency Stop Buttons
Programming Language	INFORM III, menu-driven programming, MotoPlus SDK (C language) – optional
Maintenance Functions	Displays troubleshooting for alarms

Note: FS100 controlled robots can be purchased without a programming pendant, but having one onsite at each installation is required to support safe operation and troubleshooting.

Standard I/O and Communications

- 16 inputs and 16 outputs
- EtherNet 10 Base T / 100 Base TX

I/O Expansion and Communications

- EtherNet/IP
- DeviceNet
- Profibus-DP
- CC-Link
- Analog outputs

Offline Programming Options

- FS100 software pendant
- MotoCom
- MotoSim EG / MotoSim EG-VRC
- Ladder Editor 32
- MotoCal V EG

Options

- Top Hat Cover
- IP54 Enclosure
- Dual Robot Control