

3 axis Stage Controllers | HSC-103

HSC-103 is designed to operate medium to high current 5-phase motor stages. The driver design reduces noise and vibration compared to older stepper motor drivers.

- USB communication (serial communication) from PC is available.
- Up to 3 axis motorized stages can be operated.



Guide

- ▶ Sample programs are available for download on our website.
 - SG Sample 32/64 bit version for Windows®
 - LabVIEW for RS232C (for v.2010/v.2012/v.2013/v.2014/v.2015)

Part Name	Part Number
3 axis Stage Controllers	HSC-103
Joy Stick	JD-100
Jog Operation Box	JS-300
Jog Dial	JB-400
MDR Cable	MDR14-CA-2.5

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Guide

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Options

- 40 × 40 mm
- 60 × 60 mm
- 80 × 80 mm
- 85 × 85 mm
- 100 × 100 mm
- 120 × 120 mm
- Others

Primary Functions

Controller Function	<input type="radio"/>
Number of Control Axes	3
Stored Program Control	<input type="radio"/>
Feedback Control	—
Circular Interpolation Control	<input type="radio"/>
Linear Interpolation Control	3 axes
Driver Function	Micro-step
Micro-step (Max. Division)	40*1
Driving Current (A/phase)	1.4*2

*1 Division is fixed.
*2 0.75A/Phase is available by switching.

General Specifications

Power Voltage	AC100 – 240V 50/60Hz
Power Consumption	200VA
Operating Temperature	5 – 40°C
Storage Temperature	–20 – 60°C
Ambient Humidity	20 – 80%RH (without condensation)
External Dimensions (W×H×Dmm)	260×260×95
Weight (kg)	3.3

Interface

GP-IB	—
RS232C	—
USB	<input type="radio"/>
Ethernet	—

Optional

CJ-200A	—
JS-300	<input type="radio"/>
JB-400	<input type="radio"/>
JD-100	<input type="radio"/>
SJT-02	—

Performance Specifications

Coordinate Indication Range	—
Max. Travel to Set	134,217,727
Max. Driving Speed (pps)	4,000,000
Min. Driving Speed (pps)	1
Acceleration/Deceleration Time (ms)	1 – 1,000

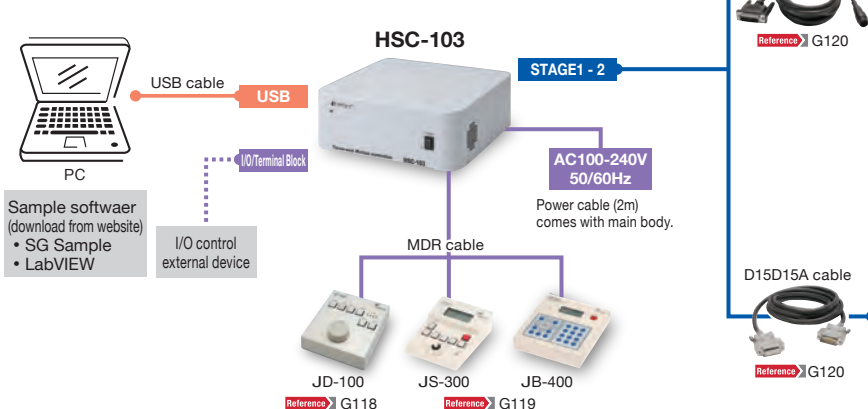
I/O Specification

Origin Sensor	<input type="radio"/>
Proximity Sensor	<input type="radio"/>
CW (+) Limit	<input type="radio"/>
CCW (–) Limit	<input type="radio"/>
General Purpose Input	4 points
General Purpose Output	4 points
Control Input	8points
Control Output	—
Trigger Output	—

Control Command

Machine Origin Return	<input type="radio"/>
Theoretical Origin Setting	<input type="radio"/>
Relative Position Drive	<input type="radio"/>
Absolute Position Drive	<input type="radio"/>
Jog Operation	<input type="radio"/>
Position Appointment	—
Circular Interpolation Control	<input type="radio"/>
Linear Interpolation Control	<input type="radio"/>
Drive	—
Deceleration Stop	<input type="radio"/>
Emergency Stop	<input type="radio"/>
Speed Setting	<input type="radio"/>
Motor Free/Hold	<input type="radio"/>
Port Input	<input type="radio"/>
Port Output	<input type="radio"/>

HSC-103 System Chart



Stepping Motor Stage

