Single axis Stage Controller | GSC-01

RoHS　CE　Catalog Code W9042

Low cost single axis stage controller with built-in 5-phase stepping motor driver.

● Can be operated by computer control using the RS232C interface, by the jog switch on the front panel, or by TTL I/O.

Guide

▶ Sample programs are available for download from our website.
  • SG Sample 32/64-bit version for Windows® (only for RS232C)
  • LabVIEW for RS232C (for v.5.1/v.6i/v7.1/v.8.6/v.2012/v.2013/v.2014/v.2015)

Attention

▶ The GSC-01 requires an external power supply (24VDC, 2A output). The PAT-001-POW1 (AC adapter) can be purchased with the controller or power can be provided by the end user.

Part Name	Part Number
Single axis Stage Controller	GSC-01
AC Adapter	PAT-001-POW1

■Primary Functions

Controller Function	○
Number of Control Axes	1
Stored Program Control	—
Feedback Control	—
Circular Interpolation Control	—
Linear Interpolation Control	—
Driver Function	Standard
Micro-step (Max. Division)	2
Driving Current (A/phase)	0.2 – 0.8

■General Specifications

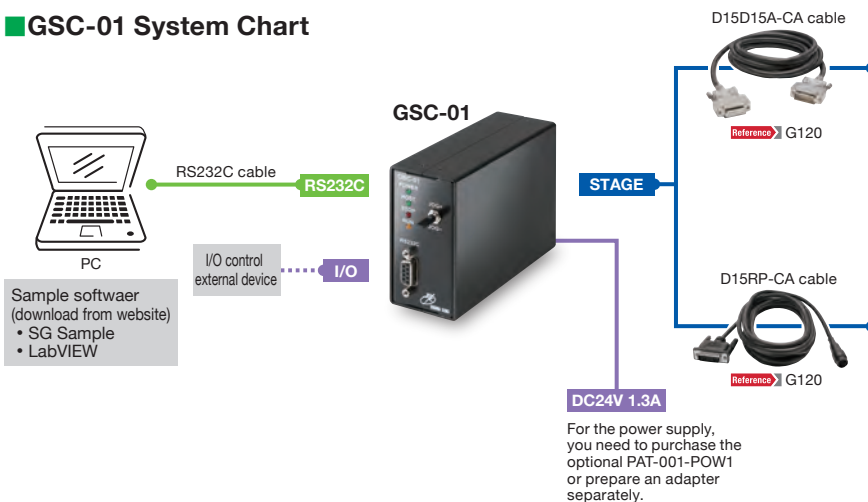|	
Power Voltage	DC24V 2A
Power Consumption	48VA
Operating Temperature	5 – 40°C
Storage Temperature	—
Ambient Humidity	20 – 80%RH (without condensation)
External Dimensions (W×H×Dmm)	47×125×90
Weight (kg)	0.4

■Interface

GP-IB	—
RS232C	○
USB	—
Ethernet	—

■Performance Specifications

Coordinate Indication Range	—
Max. Travel to Set	16,777,215
Max. Driving Speed (pps)	20,000
Min. Driving Speed (pps)	100
Acceleration/Deceleration Time (ms)	0 – 1,000

■I/O Specification

Origin Sensor	—
Proximity Sensor	—
CW (+) Limit	○
CCW (–) Limit	○
General Purpose Input	4 points
General Purpose Output	4 points
Control Input	3 points
Control Output	—
Trigger Output	—

■Control Command

Machine Origin Return	○
Theoretical Origin Setting	○
Relative Position Drive	○
Absolute Position Drive	○
Jog Operation	○
Position Appointment	—
Circular Interpolation Control	—
Linear Interpolation Control	—
Drive	○
Deceleration Stop	○
Emergency Stop	○
Speed Setting	○
Motor Free/Hold	○
Port Input	○
Port Output	○
Origin Offset Setting	○
Jog Operation Speed Setting	○

■GSC-01 System Chart

Stepping Motor Stage

D15D15A-CA cable

OSMS series

Reference▶ G120

GSC-01

RS232C cable — RS232C

PC

Sample softwaer (download from website)
• SG Sample
• LabVIEW

I/O control external device ···· I/O

STAGE

D15RP-CA cable

Reference▶ G120

OSMS-ZF
OSMS-40/60YAW
SGSP-ACT-B0
TAMM
OSMS-A
HPS
HDS
series

DC24V 1.3A

For the power supply, you need to purchase the optional PAT-001-POW1 or prepare an adapter separately.

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