

GS-611 Series motion controller

-- Stepper driver, controller, computer all-in-one



Overview

GS-611 motion controller integrates Googol Technology's GUS series controller with stepping motor drive. It can control and drive 6 stepping motors simultaneously. It possesses excellent point-to-point motion function and is especially suitable for point-to-point control type equipment such as automatic welding robot, automatic screw assembly machine, automatic glue spreading machine, medical analysing equipment and biotechnology equipment, etc.



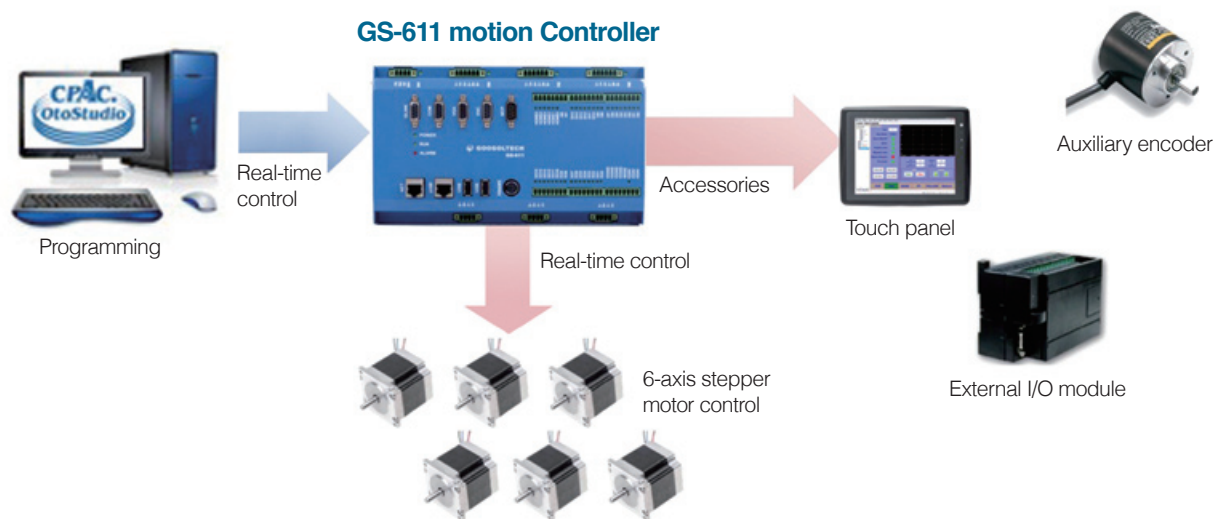
Main Features

1. Integration of up to 6-axis motion control and stepping motor drive. Stepping motor can be connected to the controller directly.
2. Fully support OtoStudio programming environment of IEC61131-3 standard.
3. Support remote diagnosis and analysis via Ethernet.
4. Support multiple-axis interpolation, step curve, Jog motion, electronic gear/electronic cam motion.
5. Supports *eHMI interface.
6. Provide low cost I/O module solution via **gLink bus.
7. 16 input/16 output local digital I/O, 6-channel zero position capture input.
8. 1-channel incremental encoder input interface.

* eHMI is a high speed and stable interface using for the communication between the controller and touch panel. The maximum length of the eHMI cable is 100M. Using RJ45 connector, user can easily make the cable with simple hand tool.

** gLink is a high speed IO communication protocol develops by Googol Technology. gLink supports speed up to 6.125Mbps.

System Layout



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Specifications

Hardware Configuration	Description
CPU	X86, 800MHz
Hard drive	4GB
RAM	512MB DDR3
Display	VGA and eHMI
USB	USB 2.0 X 2
Keyboard and mouse	KB/MS 2 in 1 port
Network	RJ45 X 1 (10/100/1000Mbps self-adaptive)
RS 232	RS 232 X 1
RS 485	RS 485 X 1
OS	WinCE 6.0
Support protocol	gLink 1DB9F 6.125Mbps
Other interface	Incremental differential encoder interface X 1 2-axis motor control differential signal output interface X 1
General Features	
Maximum no. of control axis	6 axes
Support stepper motor type	2 phase; 4 wire/ 6 wire/ 8 wire; 42/ 57/ 86 and other models of stepping motor
Microstepping	1, 2, 4, 8, 16, 32, 64, 128, 256, 5, 10, 20, 25, 40, 50, 100, 200
Input voltage range	15VDC~50VDC
Motor current range	0.5A~4.5A
Development environment	OtoStudio***
Motion control function	S curve, trapezium curve, jog motion, electronic gear/ cam motion, PT mode, PVT mode, linear interpolation mode
Hardware capture	Home signal capture function
Digital I/O	Input X 16, Output X 16
Analog Input	1-channel differential analog or 1-channel thermocouple input
PWM Output	2-channel PWM signal output
Home signal	6-channel home signal input (can realize hardware capture function or can be used for common digital input)
Operation Voltage	+24VDC \pm 10%
Operation Current	Icc = 0.5A MAX
Operating temperature	0°C ~55°C
Humidity	5%~90% non-condensing
Dimension	(L) 266 x (W) 145 x (H) 67 (mm)

***The development platform OtoStudio is based on IEC61131-3 programming standard, users can use instruction list, ladder diagram, function block diagram, structure text and sequential function chart to do programming. For more details, please refer to the CPAC catalog or contact Googoltech.

Ordering Guide

	Model Number	Description	Picture
Standard Package	GS-611	Motion Controller X 1, PS/2 cable X 1, Product CD X1	
	Power Supply		
Optional Accessories	ACC-DC24	24V DC power supply	
	Extended IO module		
	CPAC-300-ACC-S1616D	Digital Input x 16, Output x 16	
	CPAC-300-ACC-S0408A	Analog Input x 8, Output x 4	
	Touch Screen		
	GTC-TP-03A	7 inch touch screen, eHMI supported	
	Cables		
CABLE-eHMI/RJ45-DB9F-3M	3m eHMI cable		
CABLE-eHMI/RJ45-DB9F-6M	6m eHMI cable		
CABLE-eHMI/RJ45-DB9F-10M	10m eHMI cable		