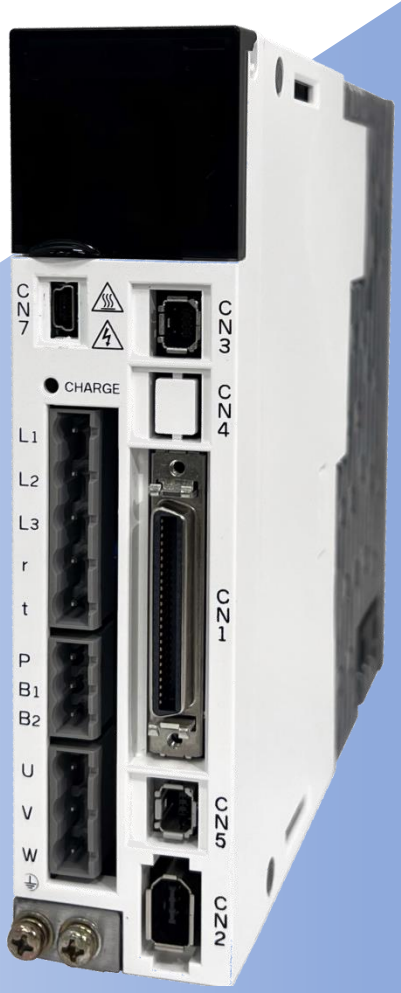
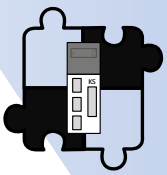
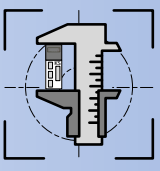
Kingservo G3E Series

Multifunctional-Integrated Driver

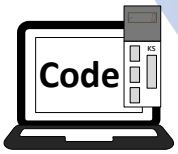




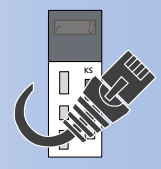
compatible with
G0, GE, G2 servo system



Error mapping



P I/O



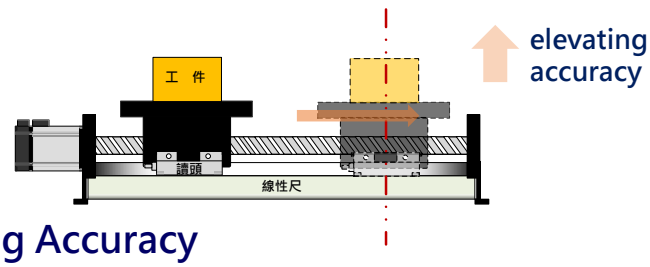
Ether CAT

Versatile & User-Friendly

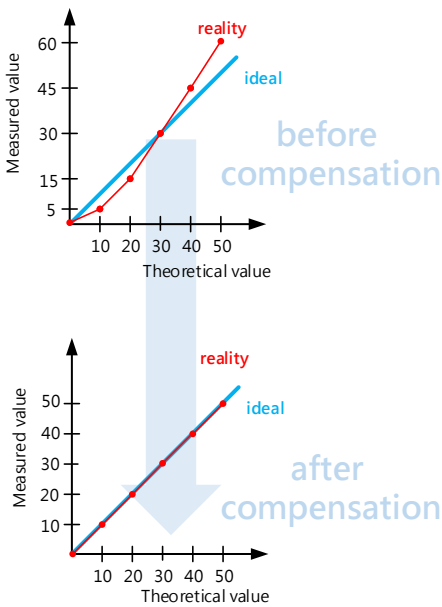
G3 Driver is a breakthrough solution designed to streamline your operations and elevate your performance:

- **Providing Universal Compatibility for Seamless Integration:**
  The G3 Driver sets a new standard in compatibility, seamlessly integrating with both GE and G2 servo motors, as well as a diverse array of motor types. The G3 Driver adapts effortlessly to existing infrastructure to overcome challenges of machine upgrades. (compatible with phase-A/B encoder & TAMAGAWA absolute encoder)
- **Saving Valuable Training Costs:**
  G3 Driver is a multifunctional-integrated device that maximizes efficiency and minimizes complexities. By consolidating various functions into a single, integrated unit, the G3 Driver empowers your team to achieve more, saving valuable training costs.
- **Reducing Inventory Pressure:**
  By embracing the G3 Driver, you're not only elevating your operational capabilities but also reducing inventory pressure.

Error Mapping



- **Elevating Accuracy**
  The G3 driver's error mapping feature ensures the motion system achieves optimal accuracy in position and control.
- **Saving Development Cost**
  With streamlined development processes, it leads to a remarkable reduction in the time of machine development.
- **Maximizing Cost-Efficiency**
  Through intelligent software compensation, the more cost-efficient spare parts will be available, ensuring operation economically optimized.

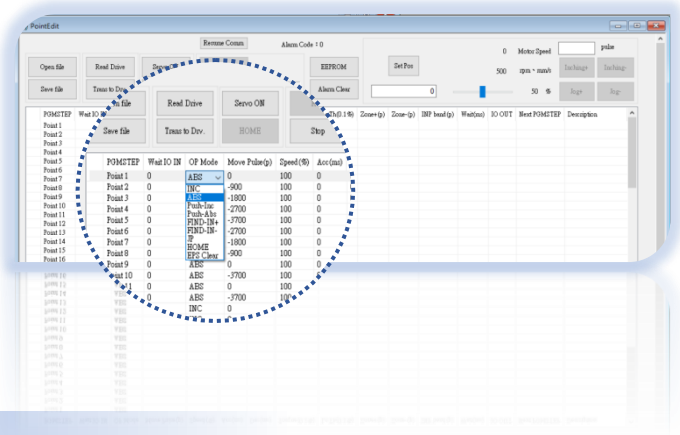


(Error mapping function needs to be used with laser-calibrated equipment.)

Kingservo

Programming I/O

- **Efficiency and Economy:**
  Say goodbye to traditional controller setups – with the G3 Driver, programming becomes a more efficient and economical process.
- **Torque Limit:**
  Position command with torque limit reduces defect rate and enhances product excellence, resulting in flawless outcomes.
- **Customized Programming:**
  Embrace the flexibility of self-programming to achieve intricate and precise outcomes.



Communication System

EtherCAT®

- High Speed & Low Delay
- Easy Wiring Extension
- Multi-Axis Application

(coming soon)

Specification

rated power		100W	200W	400W	750W
model	KSDG3	121	221	421	821
input power	main circuit	single phase, 190~240V 50/60Hz			
	control circuit	single phase, 190~240V 50/60Hz			
input current	main circuit (Arms)	1.4A	1.9A	4A	6.7A
continuous output current	3 PH, (Arms)	1.3A	1.72A	2.82A	5.4A
maximum output current	3 PH, (Arms)	3.9A	5.16A	8.46A	16.2A
environment	temperature	operation : 0~55℃, storage : -20~+80℃ (without frost)			
	humidity	operation / storage : under 90%RH (without frost)			
	height	under 1000m			
	vibration	under 5.88m/s², 10~60Hz(It cannot be operated at the resonant frequency.)			
control method		IGBT PWM sine-wave drive			
communication encoder feedback		21bit(resolution: 2,097,152) incremental encoder(Kingservo Format) 17bit/23bit absolute/incremental encoder (Tamagawa Format)			
optical scale encoder feedback		1. It only receives phase-A & phase-B differential signal encoder. 2.It will be the 2nd feedback(fully-close loop) when it is used with standard electric machine(communication encoder). 3. It will be the main feedback encoder when it is used with a linear motor or a direct drive motor.			
Hall Sensor feedback		It is available when being used with a linear motor or a direct drive motor.			
signal control	input	11+2 inputs: The function of inputs differ because of control mode difference.(self-definition)			
	output	6 outputs: The function of outputs differ because of control mode difference.(self-definition)			
analog signal	input	3 inputs (A/D)			
	output	2 outputs (for monitor) (1) speed monitor(2) torque monitor			
pulse signal	input	parameter selections: (1) Line Driver: "Line Driver" interface can be selected through parameter.(4Mpps,500kpps) (2) Photo-coupler: The pulse wave can be input into "Photo-coupler" interface.(200kpps)			
	output	1. pulse wave(phase-A, B, Z) that is output through driver interface 2. pulse wave(phase-Z) that is output through open-collector interface			
ICF	USB	for personal computer			
	RS232	slave, full duplex, maximum velocity: 115, 200bps			
	RS485	slave, half duplex, maximum amount: 31 axes, maximum velocity: 115,200bps			
	EtherCAT	CIA402, CANOPEN protocol, HM, CSP, CSV, CST mode, communication cycle: 100us			
regenerative resistor		built-in regenerative resistor(10W)			
control mode		There are 7 modes to be switched by parameter settings: (1) positioning control (2) speed control (3) torque control (4) positioning/speed control (5) positioning/torque control(6) speed/torque control (7)PIO mode			
Product Safety Certification		CE, IEC/EN61800-3, IEC/EN61800-5-1			
auxiliary function	motor wizard	The auxiliary function is available for parameter settings of motor when the driver is used with any non- Kingservo motors such as a linear motor or a direct drive motor.			

HO FO Automation CO.,LTD

http://www.hofo.com.tw/zh-tw

2F., No.46, Liufu Rd., Luzhu Dist., Taoyuan City 338, Taiwan

☎+886-352-6661 Fax+886-352-9991

Kingservo