Product Specifications

1. Product Overview

1.1 Product Name: JGHSD Servo Drive

1.2 Product Model: JGHSD-X25D24RC-RU

1.3 Product Description:

The JGHSD series DC servo drives are special designed, featuring ARM+FPGA chips and high-quality IGBT power modules. They are compact, reliable, and support wide temperature and high-altitude operation.

- Input Voltage DC24v/DC48v
- Rated current: 25A
- High power density design, compact and small-sized
- Speed control range: 0~12000 rpm
- Operating temperature: -40℃ to +85℃
- Supports CAN Open, RS485 communication
- Multiple control modes: position/speed/torque control

2. Technical Parameters

2.1 Parameter Table

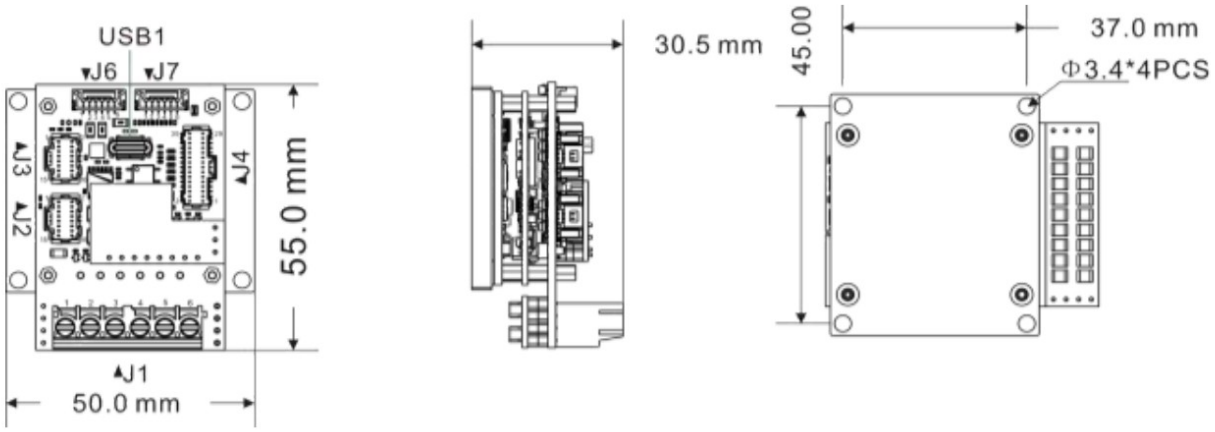
Items			Specification
Basic Specification	Size		50mm*55mm*32mm
	Operation Conditions	Operation Temperature	-40℃~+85℃
		Storage Temperature	-45℃~+85℃
		Humidity	<90%RH [No frost]
		Vibration/Shock resistance	≤4.9G/19.6G
		Pollution level	PD2
		Operation Altitude	≤5000m,1% reduction for every 100m above 1000m
Signals	STO (Safe Torque Off)		2 channels
	DI (Digital Input)		6 channels
	DO (Digital Output)		4 channels
	AI (Analog Input)		2 channels
	Communication		RS485、CANopen
	Motor Feedback		Incremental ABZ Encoder, Absolute BISS/SSI Encoder, Absolute Tamagawa Encoder, Hall Encoder, Resolver
Built-in Functions	Protection Functions		Overcurrent, Overvoltage, Undervoltage, Overload, Stall, Main Circuit Detection Abnormal, Heat Sink Overheating, Overspeed, Encoder Abnormal, Parameter Abnormal, etc.
	Debugging Interface		USB
	Ease of Use		User-friendly Debugging Interface, Motor Parameter Setting, Motor Autotuning, Expert Debugging, Speed Loop, Position Loop, Current Loop, Motor Debugging Operation Function, Angle Identification, etc.
Performance	Current Loop Dynamic Characteristics		Step Response: 187.5μs(0~100%) Frequency Response: Amplitude Attenuation Bandwidth at -3dB，2000Hz(Input signals: ±25%) Phase Shift Bandwidth at -90°, 3500Hz(Input signals: ±25%)
	Speed Control Range		0~12000rpm, over 6000rpm ，please contact with technical support
	Speed Loop Dynamic Characteristics		Step Response: 562.5μs(0~1000rpm) Frequency Response: Amplitude Attenuation Bandwidth at -3dB, 1000Hz(Input command: ±500rpm) Phase Shift Bandwidth at -90°, 630Hz(Input command: ±500rpm)
	Torque Control Accuracy		±2%

2.2 Interface Information Table

Type	Interface ID	Cores Qty.	Interface Definition	Remarks
Power Supply	J1	6	Motor Power out/DC power in	U_out/V_out/W_out/PE, DC+_in/DC-_in
1st Encoder Interface	J2	16	1st Encoder connector	
2nd Encoder Interface	J3	8	2nd Encoder connector	
I/O Interface	J4	15	Input/Output Connector	
Communication (In)	J6	6	RS485+CAN In	RS485+/RS485-/CANL/CANH/GND/PE
Communication (Out)	J7	6	RS485+CAN Out	RS485+/RS485-/CANL/CANH/GND/PE
Debugging	USB1	/	Type-c serial	

3. Overall Dimensions

3.1 Dimension Drawing



3.2 Appearance Photos