SSD2505PR

- 32 bit DSP control technology, low noise/vibration with excellent stability and low cost
- Current automatically change according to load
- 16 constant-torque microstep settings, 200 microsteps the highest
- Input voltage range: DC24~50V
- Excellent high-speed performance and rigidity, perfectly integrated the advantages of servo and stepper
- Less torque attenuation, with 3000rpm efficient working speed
- RS-485 bus, support standard ModBus-RTU protocol, mounting 30 devices the most
- Built-in single-axis controller and digital drive function, supporting position control, speed control and multi-position control mode

Typical Application:

Widely used in textile machines, embroidery machines, security equipment, stage lighting, robots, medical equipment, laser equipment, marking machines, plotters and other automation equipments.

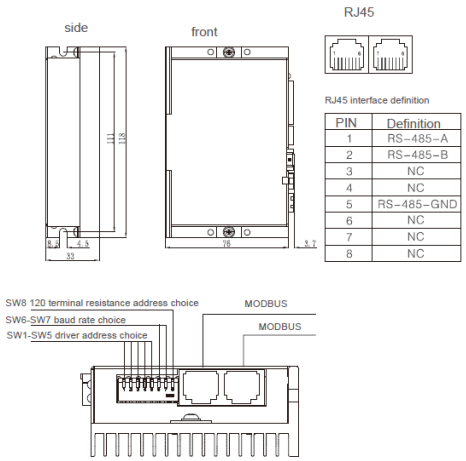
Product Details

Description

SSD2505PR takes the advantages of 32-bit DSP control technology and power angle control technology, maximum speed reaches more than 3000rmp. It's high-speed torque attenuation is much lower than ordinary open-loop stepper drive, which can greatly enhance the high-speed performance and torque efficiency, and reduce motor heating/vibration, thus to enhancing machine's efficiency and accuracy.
SSD2505PR integrated with bus communication and uniaxial controller, equipped with RS-485 interface, and support standard ModBus-RTU protocol.
It has 2 photoelectric isolated programmable high-speed differential input terminals, 5 photoelectric isolated programmable input terminals and 3 photoelectric isolated output terminals. With those multiple input/output terminals, it's used to carry out current setting, position control, speed control, home position return and other uniaxial motion control.
SSD2505PR is particularly suitable for long distance, strong interference environment, and multiple motor control applications. Since it has uniaxial control function, users don't need to purchase controller anymore, thus greatly reduce costs.

Product Diagram

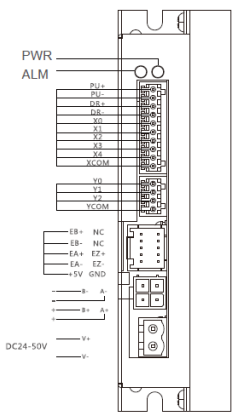
Installation Dimensions (mm)



RJ45 interface definition

PIN	Definition
1	RS-485-A
2	RS-485-B
3	NC
4	NC
5	RS-485-GND
6	NC
7	NC
8	NC

Driver Connection



COM Setting

Terminal Resistance Setting

120 choice of terminal resistance	SW8
invalid	OFF
valid	ON

COM Baud Rate Setting

Baud rate	SW7	SW6
9600(default)	ON	ON
19200	ON	OFF
38400	OFF	ON
115200	OFF	OFF

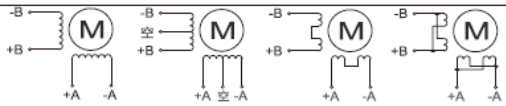
COM Address Setting

add.	custom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
SW5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SW4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON
SW3	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
SW2	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW1	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

add.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
SW5	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
SW4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON	ON	ON
SW3	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON
SW2	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW1	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

Terminal Assignment

Terminal Introduction

Mark	Function	Specification
PWR	power light	Light on once power on.
ALM	alarm light	Over-current, flash one time;Over-voltage,flash twice; Under-voltage,flash three times; EEPROMEEPROM error, flash four times; COM erro, flash five times.
PU+		+5V~+24V can drive, must add resistance on PU- to control current if the voltage is higher than +5V.
PU-		Effects on falling edge. Input resistance 220Ω. Requirements: low level 0-0.5V, high level 4-5V, pulse width>2.5μs
DR+		+5V~+24V can drive, must add resistance on PU- to control current if the voltage is higher than +5V.
DR-		Effects on falling edge. Input resistance 220Ω. Requirements: low level 0-0.5V, high level 4-5V, pulse width>2.5μs
X0~X4	5 channels of programmable input	Support NPN & PNP wiring modes
XCOM	common input port	Support NPN & PNP wiring modes
Y0-Y2	3 channels of programmable output	
YCOM	common output port	Support NPN & PNP wiring modes
EB+/EB-	encoder B phase	Encoder B phase input
EA+/EA-	encoder A phase	Encoder A phase input
+5V	encoder power	Encoder 5V power supply
GND	encoder GND	
A+ A-	motor connection	
B+ B-		