

product features

一体关节伺服

隔离CanOpen通讯，内置隔离电源。

谐波减速器，电机，驱动器，编码器一体化。

低功耗多圈绝对值，内置电池，自动充电。



1. Isolation of the CANOPEN communication, in compliance with the CiA301 V4.2.0 specification.
 - A. Supports SDO, TPDO, and RPDO.
 - B. Support for speed mode, position mode (contour mode, interpolation mode).
 - C. Support heartbeat production and consumption
2. A 15-bit absolute encoder with one-lap pulses up to 32,768.
3. Multi-stage DD motor structure, large torque output.
4. Harmonic reducer, motor, drive encoder integration.
5. Low noise, low vibration, high-speed positioning, high reliability.
6. FOC field directional vector control, support position / speed closed loop.
7. Works at a zero lag given a pulse state, following a zero lag.
8. The 16-bit electronic gear function.
9. A CANOPEN upper position computer is provided to monitor the motor status and modify the parameters.
10. Position mode, support the pulse + direction signal, the encoder follows

11. Speed mode, support for PWM duty cycle signal speed modulation
12. With blocking rotation, overcurrent protection, overpressure protection.
13. Low power consumption and multiple cycles of absolute value:
 - A. The all-in-one servo 485 / CAN communication version can add multiple-loop function.
 - B. When the motor has power supply, there is an internal charging circuit to charge the battery. When the motor is powered off, the consumed battery current is only 0.07mA.
 - C. After the motor has no power supply, the motor shaft is driven to rotate to wake up the encoder and continue to remember the position.
 - D. Multi-lap memory range-60,000 to 60,000 laps.
 - E. Simple to set the origin, go to any position can be placed as the origin.
 - F. A variety of ways back to zero: communication back to zero, power automatically back to zero, output zero point signal.
 - G. Error protection: battery power loss alarm.

Motor parameter table

Model parameter		M8010E17B50	M8010E17B80	M8010E17B100
Overall parameters	The motor is rated voltage	36VDC±10%	36VDC±10%	36VDC±10%
	Rated current of motor	3.5A	3.5A	3.5A
	Output torque after deceleration	34NM	51NM	51NM
	weight	1KG	1KG	1KG
	Speed range after the deceleration	0~30RPM	0~18RPM	0~15RPM
Reducer parameters	reduction gear ratio	50	100	100
	Output rated torque	34NM	51NM	51NM
	Start and stop peak torque	44NM	70NM	70NM
	back clearance	Less than 20 arc-sec	Less than 20 arc-sec	Less than 20 arc-sec
	designed life	8500hour	8500hour	8500hour
parameter of electric machine	torsion	1NM	1NM	1NM
	rated speed	1500RPM	1500RPM	1500RPM
	maximum speed	2000RPM	2000RPM	2000RPM
	power	100W	100W	100W
	resistance	0.86	0.86	0.86
	inductance	0.8mh	0.8mh	0.8mh
	moment of inertia	$0.69 \times 10^{-4} \text{ KG/M}^2$	$0.69 \times 10^{-4} \text{ KG/M}^2$	$0.69 \times 10^{-4} \text{ KG/M}^2$
return signal	Multi-lap Absolute encoder (15-bit 16-bit)			
cooling-down method	natural cooling			
Position control mode	Maximum input pulse frequency	500KHz		
	Pulse instruction mode	Pulse + direction, Phase A + B phase (controller supports AB pulse, highly recommended)		
	Electronic gear ratio	Set a range of 1~65535 compared to 1~65535		
	Location sampling frequency	2KHz		
defensive function	Block turn alarm, overflow alarm			
CI	Canopen (CAN communication, rate 1M)			
service environment	ambient temperature	0~40°		
	The motor allows	85°		

for the maximum temperature of the temperature	
humidity	5~95%

Interface definition

1. Power interface

Terminal serial number	name	function
1	+V	DC power supply positive electrode, + 24V~36V. Positive, positive and negative connection will directly short-circuit the power supply, and may also damage the drive
2	GND	DC power supply ground. Positive, positive and negative connection will directly short-circuit the power supply, and may also damage the drive

