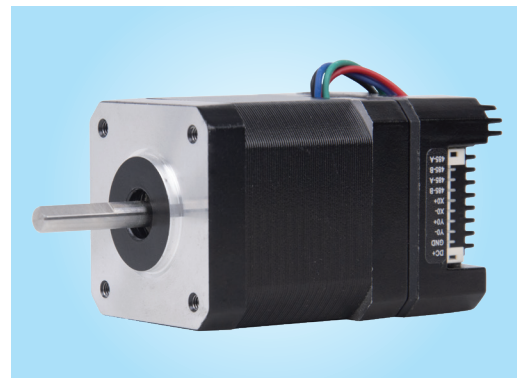


EMP42 Driver Integrated Stepper Motor

● Description

IRS42E integrated RS485 closed-loop stepper driver is the latest digital hybrid stepper servo driver with serial port debugging function, integrated MODBUS-RTU standard protocol specification, power supply and communication interface using XH2.54-8P header. Users can set subdivision, current, speed, working mode and other parameters through the host computer software, It greatly enriches the practical functions of the product and can meet the application requirement of most occasions.



● General Information

- DC power supply, input voltage range: DC12V~40V
- 32-bit DSP technology, with good stability, strong compatibility
- Support open and closed loop mode switching
- Support speed mode, position mode, multi-segment position mode (reserved) and return to origin mode
- RS485 interface with isolation, support standard MODBUS-RTU protocol
- DIP code SW1-4 sets the driver communication address, which can support 16 devices, and more can be set
- Built-in micro-subdivision, excellent low-speed stability
- Alarm protection functions such as over-current (reservation), over-voltage, under-voltage, phase loss, out-of-tolerance, etc.

● Controller Parameter

Specification	IRS42E			
	Unit	Min	Normal	Max.
Continuous output current	A	0	/	2
Input voltage	V	12	24	40
Control signal input current	mA	7	10	16
Insulation resistance	MΩ	50	/	/

EMP42 Driver Integrated Stepper Motor

● Motor Parameter

EMP042NB							
Part No	Frame Size (mm)	Phase Current (A)	Phase Resistance (Ohms)	Phase Inductance (mH)	Holding Torque (Ncm)	Rotor Inertia (g.cm ²)	Length (mm)
EMP042NB001	42	0.4	24	3.6	17	20	46
EMP042NB335	42	1.7	1.5	3.2	44	54	62
EMP042NB522	42	0.5	22	33	50	68	70
EMP042NB607	42	1.2	6	15.6	80	82	82

● Operating Conditions

Operation ambient	Condition	No dust, no oil, no corrosive gas, Without strong vibration
	Temperature	-25°C ~ +50°C
	Humidity	40-90%RH
	Vibration	10-55Hz/0.15mm
Storage temperature		-25°C ~ +65°C

● Mechanical

