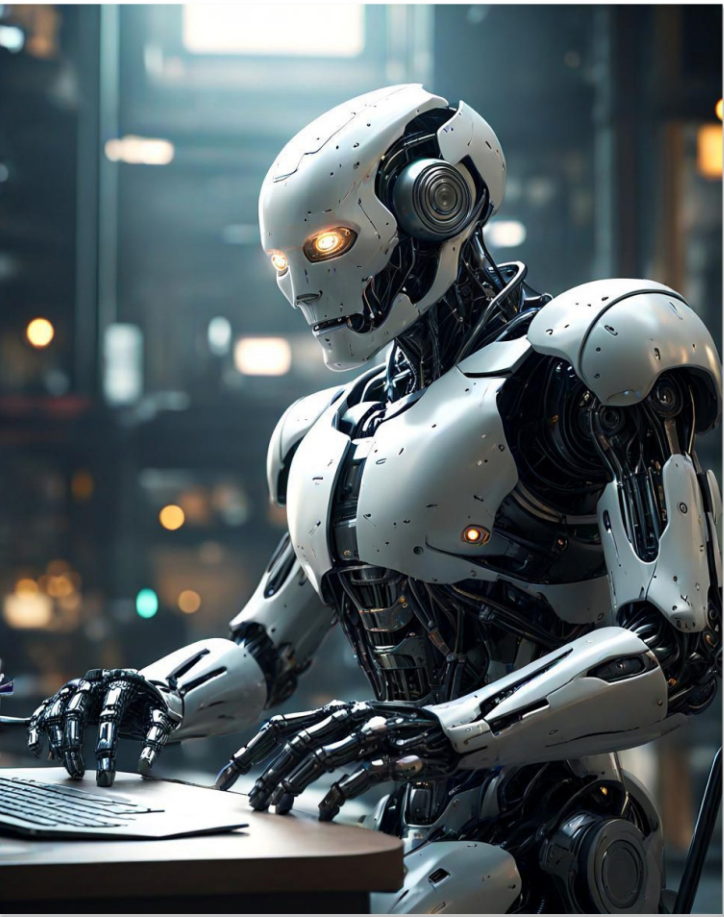




Motor, Drive, Automation, Intelligence



## GRMOT

Shenzhen GRMOT Technology Co.,LTD

We supply:

Precision motors, motor drives, motion control, intelligent control, precision reducers and other core components and key technologies

Stepper motor and driver

DC brushless motor and driver

Servo motors and drivers

Reducer

Switching power supply

Intelligent control board

Customized intelligent control solution

## Core Technology and Originality

Drive control integrated motor and control software

Stepper motor open-loop driver and control software

Stepper motor closed-loop driver and control software

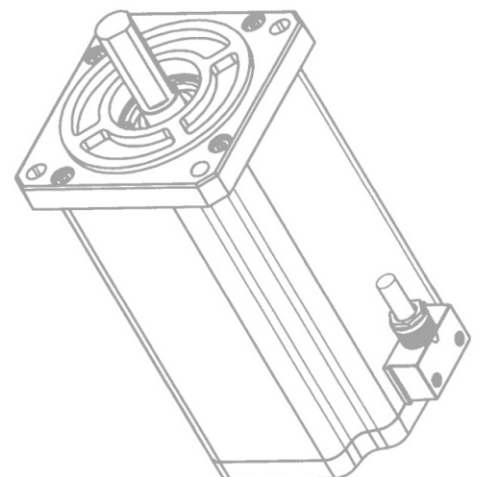
Digital stepper motor 485 bus controller and software

Stepped servo drive vector controller and algorithm software

Design of open-loop driver integrated circuit for stepper motor

Design of integrated circuit for closed-loop driver of stepper motor

Can Network Intelligent Integrated Stepper Servo Controller and Software





## GRMOT's Technological Beliefs

Continuous investment  
Advanced research and development  
Endless pursuit  
Continuously surpassing oneself  
Breakthrough at the forefront of technology  
Leading the development of the industry

After more than a decade of continuous research and development in motor controllers, algorithms, and software, we have achieved technological breakthroughs and systematization, forming a market advantage for our products and providing feasible and reliable solutions for various customer needs. Gree's emphasis and continuous investment in research and development far exceed its peers, creating Gree's leading position and leadership in the industry technology field.

Shenzhen GRMOT Technology Co., Ltd. was rated as a national high-tech enterprise by the Shenzhen Municipal Government in 2022. Having multiple intellectual property rights, including

67 patents

35 software copyright

Annual R&D investment:

21% annual income





## R & D TEAM

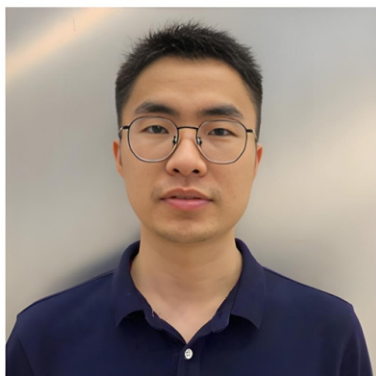
**GRMOT**  
格睿力源



### Xie Hai Founder, CEO, Chief Engineer

A high-level talent in Shenzhen, with a master's degree from Guilin University of Electronic Science and Technology. He has served as a laser engineer for DaZu and a research and development leader for R&C automation drives. He has been engaged in the electronic motor industry for more than ten years and has achieved extremely fruitful research results in the fields of motor drives, algorithms, and software. He has more than 40 patents, including invention patents, and more than 30 software copyrights. He is one of the few leading figures in the motor and drive industry. After establishing GRMOT, he continuously deepened and practiced his research results, applied for a large number of patents and copyrights, which became the cornerstone of GRMOT's development into a national high-tech enterprise. Xie Hai is still at the forefront of technological innovation, leading the R&D team of Gree to lead the development of industry technology.

Founder's message: "Do one job and love one job.  
Spend a lifetime doing well in motor control.  
Love motor control with all your energy"



### Tuo Chaojing, R&D Director

I have been engaged in the research and development of motor control technology for many years, and have in-depth research on motor control algorithms. Apply for more than 20 patents and software copyrights. I am currently serving as the Chief Engineer of the R&D department at GRMOT.



### Hu Hongzhi, Scientist

Graduated from the University of Electronic Science and Technology of China with a major in Testing and Metrology Technology and Instruments, holds a PhD in Engineering, and is an associate professor. Engaged in research on intelligent perception and optimization decision-making, obtained more than ten national patent authorizations, and successively won the third prize of Guangxi Science and Technology Progress Award and the third prize of Technical Invention Award.



### Kane Huang, Sales Director

Engaged in marketing of automation products, online sales for many years. Deeply understand automation changes and development trends in the product market, as well as customer's core needs. Providing customers with development of the latest products and continuous after-sales service. In terms of business, I have accumulated rich experience.

"Serve every customer,  
understand every customer,  
Add value to every customer. "



# Production Capacity, Quality Policy, and Corporate Responsibility

**GRMOT**  
格睿力源



## Workshop

- 3 SMT production lines
- 3 winding production lines
- 1 CNC production line
- 6 assembly production lines
- 1 aging production line
- 1 testing production line

We have a monthly production capacity of 300000 motors and 100000 drives. We have an excellent sample technology department to cooperate with customers' various needs for sample making, innovate and create new products. A professional quality inspection department ensures that every GRMOT product achieves GRMOT's pursuit of product quality.



## Quality Policy

Always remember that quality is the cornerstone of GRMOT.'s survival and the reason why customers choose GRMOT.

We accurately convey customer requirements and expectations to the entire value chain of GRMOT, jointly building quality;

We respect the rules and procedures, and do things right once;  
We unleash the potential of all employees and continuously improve;

We balance opportunities and risks with our clients, respond quickly to their needs, and achieve sustainable development.

GRMOT promises to provide customers with high-quality products, services, and solutions, continuously allowing them to experience our commitment to creating value for every customer.



## Corporate Responsibility

### Environmental responsibility:

GRMOT upholds the concept of sustainable development, reducing carbon emissions, conserving resources, and promoting circular economy in its operations..

### Social responsibility:

GRMOT focuses on employee welfare, labor rights, and community development, providing a good working environment, fair compensation, and development opportunities, and participating in community service.

### Economic responsibility:

GRMOT ensures transparency and compliance in its operational activities while pursuing profits.

### Moral responsibility:

GRMOT adheres to business ethics standards, is honest and trustworthy, and has won the trust of consumers and society.





## Solution and Application Scenarios

**GRMOT**  
格睿力源



Electronic manufacturing equipment



Industrial Robot



Medical Equipment



Lithium Battery Equipment



Logistics Equipment



Special Machine Tools



Spray Printing Equipment



AGV Equipment



Textile and Clothing Equipment



Packaging Equipment



Test Equipment



Photovoltaic Equipment

## Two Phase and Three-phase Digital Drivers



The two-phase and three-phase digital stepper drivers launched by GRMOT Technology Co., Ltd. adopt a servo like control principle, integrating vector control technology, built-in micro segmentation technology

The integration of adaptive filtering technology greatly optimizes the performance of stepper motors, ensuring smooth operation at low, medium, and high speeds with minimal noise. Accurate and smooth pure sine current vector control

The technology effectively reduces motor heating. It has extremely high cost-effectiveness and can meet the application needs of the vast majority of occasions.

Digital Stepper Drivers				
Type	Model	Current (A)	Voltage (V)	Adapt Motor
Two Phase Digital Stepper Drivers	DM456S	1.4~5.6	DC(24~48)	42、57、60、86
	DMA556S	1.4~5.6	AC(18~36)/DC(24~50)	42、57、60、86
	DMA856S	1.4~5.6	AC(18~55)/DC(24~80)	42、57、60、86
	DMA872S	2.1~7.2	AC(18~55)/DC(24~80)	57、60、86
	DM422-JS	0.3~2.2	DC(12~40)	28、35、42
	DM542M	1.0~4.2	DC(20~50)	42、57
	DM556M	1.4~5.6	DC(20~50)	42、57、60、86
	DM542S	1.0~4.2	DC(20~50)	42、57
	DM542	1.0~4.2	DC(20~50)	42、57
	DM556S	1.4~5.6	DC(20~50)	42、57、60、86
	DM556	1.4~5.6	DC(20~50)	42、57、60、86
	DMA556	1.4~5.6	AC(20~36)/DC(24~50)	57、60、86
	DM860H-KT	2.4~7.2	AC(20~80)/DC(24~110)	86、110
	DMA1-860	2.4~7.2	AC(20~80)/DC(24~110)	86、110
	DS535	0.3~3.5	DC(20~50)	28、35、42
	MINI DS556	1.4~5.6	DC(20~50)	42、57、86
	DS556	1.4~5.6	DC(20~50)	42、57、86
	GRX04	1.4~5.6	DC(20~50)	42、57、86
	DS860H	2.4~7.2	AC(20~80)/DC(24~110)	57、86、110
	DM456-V-24	1.4~5.6	DC(20~50)	42、57
Three Phase Digital Stepper Drivers	3DM583	2.1~8.3	DC(20~50)	57、86
	GR3522A	0~5.2	AC200V~240V	Three Phase86,110
	GR3722A	1.3~7.0	AC200V~240V	Three Phase110,130

## Closed Loop Driver/Hybrid Servo



Closed Loop Driver/Hybrid Servo				
Type	Model	Current	Voltage	Adapt Motor
Closed Loop Driver/Hybrid Servo	HS1-42	adaptive	AC(20~36)/DC(24~50)	42
	HS1-57	adaptive	AC(20~36)/DC(24~50)	57、60
	HS1-60-SC	adaptive	AC(20~50)/DC(24~70)	57、60、86
	HS86HV	adaptive	AC(20~80)/DC(24~110)	57、60、86

HS1-42, HS1-57, HS1-60-SC AC/DC pulse type closed-loop stepper driver is the latest product launched by GRMOT. It adopts the latest dedicated motor control digital signal processor and is an advanced motion control device that combines the advantages of traditional stepper drivers and closed-loop feedback systems. It can provide higher precision, greater torque output, and lower driving noise.

HS1-42, HS1-57, HS1-60-SC have reserved brake output control function, which can stably output about DC24V voltage within the working voltage range. Users can directly connect the power line of the brake (pay attention to distinguishing positive and negative), without the need for external relays or other devices, which can greatly facilitate user use.

HS1-42, HS1-57, HS1-60-SC have serial port debugging function and communication adopts MINI USB interface. Users can set various parameters such as subdivision, current, and working mode through PC upper computer debugging software, greatly enriching the practical functions of the product and meeting the needs of the vast majority of applications.

HS86HV is the latest digital hybrid stepper servo driver with serial port debugging function launched by GRMOT. It adopts the latest 32-bit DSP control technology and integrates MODBUS-RTU standard protocol specifications. Users can set multiple parameters such as subdivision and working mode within 200-40000 through the upper computer debugging software, greatly enriching the practical functions of the product and meeting the application needs of most occasions.

The HS86HV driver adopts a servo like control principle, which is compatible with the dual advantages of open-loop stepper and servo systems, completely solving the problem of open-loop stepper step loss, greatly improving the performance of the stepper system, while reducing motor heating and low-speed vibration. Compared to servo systems, it greatly reduces the difficulty of debugging, has the advantages of fast start stop and vibration free shutdown, and is small in size, low in cost, and high in cost-effectiveness, which can meet the needs of the vast majority of applications.

# RS485 Bus Driver, EtherCAT Bus Driver



The 485 bus type open-loop and closed-loop stepper driver is the latest digital hybrid stepper servo driver with serial port debugging function launched by GRMOT. It integrates the MODBUS-RTU standard protocol specification, and the communication network port adopts a standard RJ45 interface. Users can set various parameters such as subdivision, current, speed, and working mode through the upper computer debugging software, greatly enriching the practical functions of the product and meeting the application needs of most occasions. The 485 bus type open-loop and closed-loop stepper driver adopts a servo like control principle, which is compatible with the dual advantages of open-loop stepper and servo systems. It adopts the latest 32-bit DSP control technology, greatly improving the performance of the stepper system. Both medium and low speeds have excellent smoothness and ultra-low noise, and the high-speed torque is greatly improved, expanding the speed application range of stepper motors. The smooth and precise pure sine current vector control technology effectively reduces motor heating, and has strong compatibility and high cost-effectiveness, which can meet the requirements of the vast majority of applications.

The EC57-K02 bus type open-loop and closed-loop integrated stepper driver adopts EtherCAT bus communication interface, integrating EtherCAT slave technology, vector control technology, built-in micro segmentation technology, adaptive filtering technology, and closed-loop control technology to achieve real-time control and data transmission of the stepper system, optimizing the performance of the stepper motor: it has excellent smoothness and ultra-low noise at medium and low speeds; The high-speed torque has been greatly improved, expanding the speed application range of stepper motors; The smooth and precise pure sine current vector control technology effectively reduces motor heating. The EC57-K02 bus type open-loop and closed-loop integrated stepper driver has perfectly supported the control systems of multiple main stations such as Beifu, Omron, Zhengmu, Huichuan, and Xinjie, and has been widely used in industries such as textile, robotics, lithium battery equipment, and 3C electronics.

RS485/EtherCAT Bus Driver				
Type	Model	Current (A)	Voltage (V)	Adapt Motor
RS485 Bus Driver	RSA28E	Open-closed-loop	AC(20~50)/DC(24~70)	28, 35, 42
	RSA57E	Open-closed-loop	AC(20~50)/DC(24~70)	42,57.60
	RSA86E	Open-closed-loop	AC(20~50)/DC(24~70)	57, 60, 86
EtherCAT Bus Driver	EC57-K02	Open-closed-loop	DC(20~50)	28, 42, 57, 60



The integrated pulse type open-loop stepper driver is a new type of motor driven integrated motor driver launched by GRMOT. It adopts the latest dedicated motor control digital signal processor to improve the comprehensive performance of the motor, reduce the heating degree of the motor, and reduce the vibration of the motor. It adopts an integrated design of the motor and driver, making the installation more compact and reducing external interference. The integrated pulse type open-loop stepper driver comes with serial port debugging function, and communication adopts MINI USB interface. Users can set various parameters such as subdivision, current, and working mode through the upper computer debugging software, greatly enriching the practical functions of the product and meeting the needs of the vast majority of applications.

The integrated pulse type closed-loop stepper driver is a new type of motor driven integrated motor driver launched by GRMOT. It adopts the latest dedicated motor control digital signal processor to improve the comprehensive performance of the motor, reduce the heating degree of the motor, and reduce the vibration of the motor. It adopts an integrated design of motor and driver, which is more compact to install and reduces external interference.

With serial port debugging function and MINI USB interface for communication, users can set various parameters such as subdivision, current, and working mode through PC based upper computer debugging software, greatly enriching the practical functions of the product and meeting the needs of the vast majority of applications.

Pulse Integrated All-in-one Machine				
Type	Model	Current (A)	Voltage (V)	Adapt Motor
Open loop pulse integrated all-in-one machine	IDH28M-32	1.4~2.1	DC(12~40)	28
	IDH28M-42	1.4~2.1	DC(12~40)	28
	IDH28M-52	1.4~2.1	DC(12~40)	28
	IDH35M-36	1.4~2.1	DC(12~40)	35
	IDH35M-56	1.4~2.1	DC(12~40)	35
	IDH42M-40	1.4~2.1	DC(12~40)	42
	IDH42M-48	1.4~2.1	DC(12~40)	42
	IDH42M-60	1.4~2.1	DC(12~40)	42
	IDH57M-56	1.4~5.3	DC(24~48)	57
	IDH57M-80	1.4~5.3	DC(24~48)	57
	IDH60M-68	1.4~5.3	DC(24~48)	60
Closed loop pulse integrated all-in-one machine	IDH60M-86	1.4~5.3	DC(24~48)	60
	ISS28M-32	adaptive	DC(12~40)	28
	ISS28M-42	adaptive	DC(12~40)	28
	ISS28M-52	adaptive	DC(12~40)	28
	ISS35M-36	adaptive	DC(12~40)	35
	ISS35M-56	adaptive	DC(12~40)	35
	ISS42M-40	adaptive	DC(12~40)	42
	ISS42M-48	adaptive	DC(12~40)	42
	ISS42M-60	adaptive	DC(12~40)	42
	ISS57M-56	adaptive	DC(24~48)	57
	ISS57M-80	adaptive	DC(24~48)	57
	ISS60M-68	adaptive	DC(24~48)	60
	ISS60M-86	adaptive	DC(24~48)	60

## 485 Bus Integrated All-in-one Machine



The integrated 485 bus open-loop and closed-loop stepper driver is the latest digital hybrid stepper servo driver with serial port debugging function launched by GRMOT. It integrates the MODBUS-RTU standard protocol specification, uses XH2.54-2P pin socket for power supply interface, PHB2.0-2 × 6P pin socket for IO input/output port and communication interface. Users can set various parameters such as subdivision, current, speed, working mode, etc. through the upper computer debugging software, greatly enriching the practical functions of the product and meeting the application needs of most occasions. The integrated 485 bus type open-loop and closed-loop stepper driver adopts a servo like control principle, which is compatible with the dual advantages of open-loop stepper and servo systems. It adopts the latest 32-bit DSP control technology, greatly improving the performance of the stepper system. Both medium and low speeds have excellent smoothness and ultra-low noise, and the high-speed torque is greatly improved, expanding the speed application range of stepper motors. The smooth and precise pure sine current vector control technology effectively reduces motor heating, and has strong compatibility and high cost-effectiveness, which can meet the requirements of the vast majority of applications.

485 Bus Integrated All-in-one Machine				
Type	Model	Current (A)	Voltage (V)	Adapt Motor
Open Loop 485 Bus Integrated All-in-one Machine	IRS28M-32	1.4~2.1	DC(12~40)	28
	IRS28M-42	1.4~2.1	DC(12~40)	28
	IRS28M-52	1.4~2.1	DC(12~40)	28
	IRS35M-36	1.4~2.1	DC(12~40)	35
	IRS35M-56	1.4~2.1	DC(12~40)	35
	IRS42M-40	1.4~2.1	DC(12~40)	42
	IRS42M-48	1.4~2.1	DC(12~40)	42
	IRS42M-60	1.4~2.1	DC(12~40)	42
	IRS57M-56	1.4~5.3	DC(24~48)	57
	IRS57M-80	1.4~5.3	DC(24~48)	57
	IRS60M-68	1.4~5.3	DC(24~48)	60
	IRS60M-86	1.4~5.3	DC(24~48)	60
Closed Loop 485 Bus Integrated All-in-one Machine	IRS28EM-32	adaptive	DC(12~40)	28
	IRS28EM-42	adaptive	DC(12~40)	28
	IRS28EM-52	adaptive	DC(12~40)	28
	IRS35EM-36	adaptive	DC(12~40)	35
	IRS35EM-56	adaptive	DC(12~40)	35
	IRS42EM-40	adaptive	DC(12~40)	42
	IRS42EM-48	adaptive	DC(12~40)	42
	IRS42EM-60	adaptive	DC(12~40)	42
	IRS57EM-56	adaptive	DC(24~48)	57
	IRS57EM-80	adaptive	DC(24~48)	57
	IRS60EM-68	adaptive	DC(24~48)	60
	IRS60EM-86	adaptive	DC(24~48)	60

# Open-loop Stepper Motor



Two Phase Open-loop Stepper Motor

Motor Size (mm)	Model	Holding Torque (N·m)	Current (A)	Shaft Diameter (mm)	Axial Length(mm)	Motor Lead Length(M)
42	GR42HB40	0.4	2.0	5.0	24.0	1.0
	GR42HB48	0.6	2.0	5.0	24.0	1.0
	GR42HB60	0.8	2.0	5.0	24.0	1.0
57	GR57HB56	1.3	4.0	8.0	21.0	1.0
	GR57HB76	2.3	5.0	8.0	21.0	1.0
	GR57HB80	2.4	5.0	8.0	21.0	1.0
	GR57HB80-30	2.4	5.0	8.0	30.0	1.0
	GR57HB100	3.0	5.0	8.0	21.0	1.0
	GR57HB112-30	3.0	5.0	8.0	30.0	1.0
	GR57HB112-30-1M	3.0	5.0	8.0	30.0	1.0
60	GR60HB68	2.2	5.0	8.0	21.0	1.0
	GR60HB86	3.0	5.0	8.0	21.0	1.0
	GR60HB86-30	3.0	5.0	8.0	30.0	1.0
86	GR86HB65	3.5	6.0	14.0	32.0	1.0
	GR86HB80	4.5	6.0	14.0	32.0	1.0
	GR86HB98	8.0	6.0	14.0	32.0	1.0
	GR86HB118	8.5	6.0	14.0	32.0	1.0
	GR86HB155	12.0	6.0	14.0	32.0	1.0

Three Phase Open-Loop Stepper Motor

Motor Base (mm)	Motor	Holding Torque(N·M)	Current (A)	Length (mm)	Shaft Diameter (mm)	Axial Length (mm)	Adapt Driver
57	GR366A	0.9	5.8	56	6.35	21	3DM583
	GR368A	1.5	5.8	78	8	21	3DM583
	GR3610A	2.5	5.8	105	8	21	3DM583
86	GR397A	2	5.2	65	9.5	30	3DMA883
	GR3910A	4.5	5.8	98	14	30	3DMA883
	GR3913A	8	3	128	14	30	3DMA883
	GR3916A	12.5	3	156	14	30	3DMA883
	GR31112A	8	3	113	19	38	GR3722
110	GR31115A	13	3	150	19	38	GR3722
	GR31118A	16	5	183	19	38	GR3722
	GR31122A	20	5	220	19	38	GR3722
	GR31125A	25	5	250	19	38	GR3722
	GR31317A	23	5	190	19	45	GR3722
130	GR31320A	30	5	220	19	45	GR3722
	GR31323A	36	6	250	19	45	GR3722
	GR31328A	50	6	280	19	45	GR3722

# Closed Loop Stepper Motor



Two Phase Closed-loop Stepper Motor						
Motor Size (mm)	Model	Holding Torque (N·m)	Current (A)	Shaft Diameter (mm)	Axial Length(mm)	Motor Lead Length(M)
42	GR42HS40-M3	0.4	2.0	5.0	24.0	0.3
	GR42HS48-M3	0.6	2.0	5.0	24.0	0.3
	GR42HS60-M3	0.8	2.0	5.0	24.0	0.3
57	GR57HS56-3M	1.3	4.0	8.0	21.0	3.0
	GR57HS80-3M	2.4	5.0	8.0	21.0	3.0
	GR57HS80-30-3M	2.4	5.0	8.0	30.0	3.0
	GR57HS112-30-3M	3.0	5.0	8.0	30.0	3.0
60	GR60HS68-3M	2.2	5.0	8.0	21.0	3.0
	GR60HS86-3M	3.0	5.0	8.0	21.0	3.0
	GR60HS86-30-3M	3.0	5.0	8.0	30.0	3.0
86	GR86HS80-3M	4.5	6.0	14.0	32.0	3.0
	GR86HS118-3M	8.5	6.0	14.0	32.0	3.0
	GR86HS155-3M	12.0	6.0	14.0	32.0	3.0



## SCT1-86 Series

The SCT1-86 Series driver is the latest DC speed and torque adjustable open-loop stepper driver launched by Gree IoT Technology Co., Ltd. It comes with a 4-digit digital tube, and users can adjust the speed and torque level values through the knob. The digital tube can display the set speed and torque level values; The power supply voltage range of the driver is DC24V~70V, mainly matched with open-loop motors of 86 bases, but it can also drive open-loop motors of 42~60 bases.

- Compact design for easy installation
- New generation 32-bit DSP technology with excellent stability, strong compatibility, and high cost-effectiveness
- Compatible with 42-86 base open-loop motors, mainly matched with 86 base open-loop motors
- Equipped with a 4-digit digital display for speed and torque level values
- The speed value and torque level value can be adjusted through the knob
- Control forward rotation, reverse rotation, and stop through a 3-speed 3-pin switch, or control start stop through the IO interface on the back of the drive
- Low vibration and low noise
- Equipped with overvoltage, undervoltage and other alarm protection functions
- Input voltage range: DC24V~70V

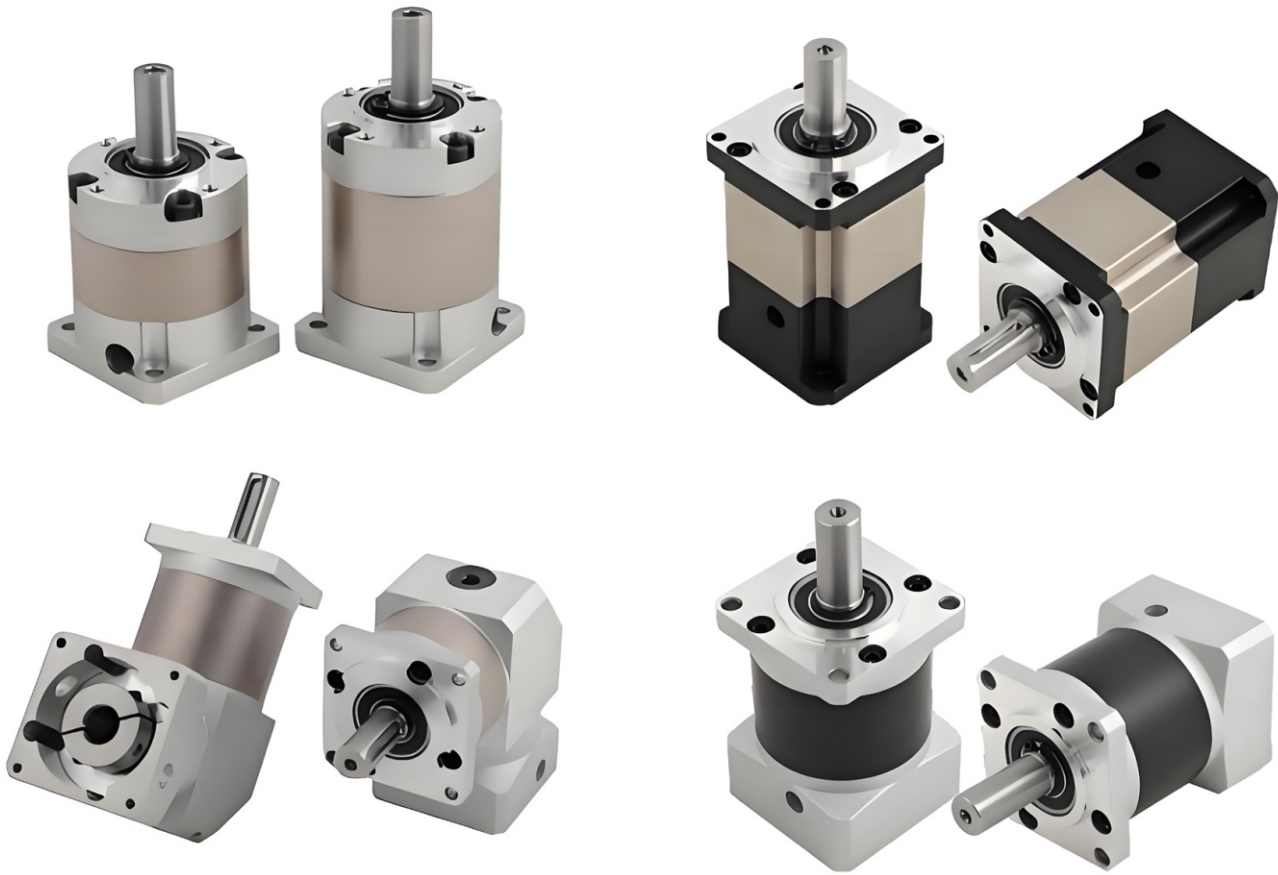
Torque Speed Controller					
Type	Control Mode	Adapt Motor	Voltage (V)	Range of torque adjustment (N*M)	Speed adjustment range(R/M)
SCT1-86-IO	Panel switch controls /external IO control	Two phase open-loop stepper motor 42~86	DC:24~70	0.1~12.5	0~600
SCT1-86E	Panel switch controls	Two phase closed-loop stepper motor 42~86	DC:24~70	0.1~12.5	0~1000
SCT1-86E-IO	Panel switch controls /external IO control	Two phase closed-loop stepper motor 42~86	DC:24~70	0.1~12.5	0~1000
SCT1-86E-RS	Panel switch controls/RS485 communication control	Two phase closed-loop stepper motor 42~86	DC:24~70	0.1~12.5	0~1000

# Brushless DC Motor



Brushless DC Motor								Brushless DC Motor							
Model	Phase	Voltage	Rotational speed	Torque	Power	Weight	Length	Model	Phase	Voltage	Rotational speed	Torque	Power	Weight	Length
GR36BL40R01-240	3	24	4000	0.035	15	180	40	GR60BL140S40-3130	3	310	3000	1.27	400	1900	140
GR36BL50R02-240	3	24	4000	0.047	20	230	50	GR70BL83S15-230	3	24	3000	0.47	150	950	83
GR36BL60R03-240	3	24	4000	0.07	30	280	60	GR70BL113S25-430	3	48	3000	0.8	250	1500	113
GR36BL60R04-260	3	24	6000	0.055	35	280	60	GR70BL128S30-430	3	48	3000	0.95	300	1800	128
GR36BL70R04-240	3	24	4000	0.096	40	280	70	GR70BL143S40-430	3	48	3000	1.27	400	2100	143
GR42BL40R02-240	3	24	4000	0.047	20	200	40	GR70BL143S50-3130	3	310	3000	1.6	500	2100	143
GR42BL50R03-240	3	24	4000	0.06	25	250	50	GR80BL75R10-230	3	24	3000	0.32	100	1.5	75
GR42BL60R03-230	3	24	3000	0.095	30	300	60	GR80BL75R15-430	3	48	3000	0.48	150	1.5	75
GR42BL80R06-230	3	24	3000	0.19	60	450	80	GR80BL95R15-230	3	24	3000	0.48	150	1.8	95
GR42BL40S02-240	3	24	4000	0.055	26	400	40	GR80BL95S20-430	3	48	3000	0.64	200	1.8	95
GR42BL50S03-230	3	24	3000	0.095	30	450	50	GR80BL95S25-3130	3	310	3000	0.8	250	1.8	95
GR42BL60S06-230	3	24	3000	0.19	60	750	60	GR80BL80S20-430	3	48	3000	0.64	200	1.8	80
GR42BL80S09-230	3	24	3000	0.28	90	1050	80	GR80BL100S40-430	3	48	3000	1.27	400	2	100
GR42BL100S10-230	3	24	3000	0.31	100	1150	100	GR80BL110S50-430	3	48	3000	1.6	500	2.2	110
GR57BL49S02-240	3	24	4000	0.055	23	400	49	GR80BL130S75-3130	3	310	3000	2.38	750	2.8	130
GR57BL55S06-230	3	24	3000	0.19	60	450	55	GR80BL145S90-3130	3	310	3000	2.86	900	3.5	145
GR57BL75S10-230	3	24	3000	0.32	100	750	75	GR86BL65S15-430	3	48	3000	0.47	150	1.6	65
GR57BL95S15-230	3	24	3000	0.47	150	1050	95	GR86BL77S20-430	3	48	3000	0.64	200	1.8	77
GR57BL115S21-230	3	24	3000	0.66	210	1150	115	GR86BL85S30-430	3	48	3000	0.96	300	2	85
GR57BL49R02-240	3	24	4000	0.055	23	400	49	GR86BL98S40-430	3	48	3000	1.27	400	2.2	98
GR57BL55R06-230	3	24	3000	0.19	60	450	55	GR86BL112S50-430	3	48	3000	1.6	500	2.5	112
GR57BL75R10-230	3	24	3000	0.32	100	750	75	GR86BL128S75-3130	3	310	3000	2.5	750	2.8	128
GR57BL95R15-230	3	24	3000	0.47	150	1050	95	GR86BL135S85-3130	3	310	3000	2.7	850	3.5	135
GR57BL115R21-230	3	24	3000	0.66	210	1150	115	GR110BL97S75-430	3	48	3000	2.38	750	4.2	97
GR60BL80S08-230	3	24	3000	0.25	80	850	80	GR110BL97S100-3130	3	310	3000	3.18	1000	4.2	97
GR60BL100S15-230	3	24	3000	0.47	150	1150	100	GR110BL127S100-430	3	48	3000	3.18	1000	6.2	127
GR60BL120S15-3110	3	310	1000	1.43	150	1500	120	GR110BL127S150-3130	3	310	3000	4.78	1500	6.2	127
GR60BL120S25-430	3	48	3000	0.8	250	1500	120	GR110BL157S100-3115	3	310	1500	6.37	1000	8.2	157
GR60BL140S40-430	3	48	3000	1.27	400	1900	140	GR110BL157S200-3130	3	310	3000	6.37	2000	8.2	157

# Reducer Motor



Reducer Motor			
Series	Model	Note	
28 Series	GRR28-L1	Suitable for 28 step stepper motors/short models	Precision type
	GRR28-L2		
	GRR28-L3		
35 Series	GRR35-L1	Suitable for 35 step stepper motors/short models	
	GRR35-L2		
	GRR35-L3		
42 Series	FLE42-L1SW	Compatible with 42 stepper motor/standard model	Transmission type
	FLE42-L2SW		
	GRR42-L1SW	Compatible with 42 stepper motor/standard model	Precision type
	GRR42-L2SW		
	GRS42-L1SW-R5/8	Compatible with 42 stepper motor/standard model	
	GRS42-L2SW-R5/8		
	GRS42-L1MA/MB	Suitable for 100W servo motor	
GRS42-L2MA/MB			
57 Series	FLF57-L1SW-R8/6.35	Ordinary type compatible with 57 stepper motor/standard model	Precision type
	FLF57-L2SW-R8/6.35		
	GRS60-L1SW-R8/6.35/10	Precision compatible 57/60 stepper motor/standard model	Precision type
	GRS60-L2SW-R8/6.35/10		
	GRS60-L1MA/MC		
90 Series	GRS60-L2MA/MC		
	GRS90-L1-R14/12.7/19	Suitable for 750W servo motor	
GRS90-L1-R14/12.7/19			
60 corner	GRZS60-L1MA/MB	Suitable for 400W servo motor	
	GRZS60-L2MA/MB		
90 corner	GRZS90-L1MA/MB	Suitable for 750W servo motor	
	GRZS90-L2MA/MB		

# Servo motors and servo drives



GRMOT List of Communication Servo Systems				
Model	Motor	Driver	Parameter	Note
TSE-B-D	60ST-CJ101330L5-B	TSE-B-D-040	400W 60flange 3000RPM 1.27NM	Position control, torque control, speed control, 485 communication
	80ST-CJ102430L5A-B	TSE-B-D-075	750W 80flange 3000RPM 2.4NM	
	80ST-CJ103330L5A-B	TSE-B-D-075	1000W 80flange 3000RPM 3.3NM	
TSD	60ST-CJ101330L5N-B-ATRD	TSD040	400W 60flange 3000RPM 1.27NM	Position control, torque control, speed control, 485 communication
	60ST-CJ101930L5N-B-ATRD	TSD040	600W 80flange 3000RPM 1.93NM	
	80ST-CJ102430L5N-B-ATRD	TSD075	750W 80flange 2500RPM 2.4NM	
	80ST-CJ103330L5N-B-ATRD	TSD075	1.0KW 80flange 2500RPM 3.3NM	
	80ST-CJ103925L5N-B-ATRD	TSD075	1.0KW 80flange 2500RPM 3.9NM	
GR-B	*110ST-M04030L4	GR20B120L4M	1.2KW 110flange 3000RPM 4.0NM	Position control, torque control, speed control, 485 communication
	*110ST-M05030L4	GR30B150L4M	1.5KW 110flange 3000RPM 5.0NM	
	110ST-M06020L4	GR20B120L4M	1.2KW 110flange 2000RPM 6.0NM	
	*110ST-M06030L4	GR30B180L4M	1.8KW 110flange 3000RPM 6.0NM	
	*130ST-M04025L4	GR20B100L4M	1.0KW 130flange 2500RPM 4.0NM	
	*130ST-M05025L4	GR20B130L4M	1.3KW 130flange 2500RPM 5.0NM	
	*130ST-M06025L4	GR30B157L4M	1.57KW 130flange 2500RPM 6.0NM	
	*130ST-M07725L4	GR30B200L4M	2.0KW 130flange 2500RPM 7.7NM	
	130ST-M10015L4	GR30B150L4M	1.5KW 130flange 1500RPM 10NM	
	*130ST-M10025L4	GR30B260L4M	2.6KW 130flange 2500RPM 10NM	
	*130ST-M15015L4	GR30B230L4M	2.3KW 130flange 1500RPM 15NM	
	130ST-M15025L4	GR30B380L4M	3.8KW 130flange 2500RPM 15NM	
GR-B2S	180ST-M17215H4	GR-36B2S-270H4M	2.7KW 180flange 1500RPM 17NM	Position control, torque control, speed control, 485 communication
	180ST-M19015H4	GR-36B2S-300H4M	3.0KW 180flange 1500RPM 19NM	
	180ST-M21520H4	GR-76B2S450H4M	4.5KW 180flange 2000RPM 21.5NM	
	180ST-M27015H4	GR-76B2S-430H4M	4.3KW 180flange 1500RPM 27NM	
	180ST-M35015H4	GR-76B2S-550H4M	5.5KW 180flange 1500RPM 35NM	
	180ST-M48015L4	GR-76B2S-750H4M	7.5KW 180flange 1500RPM 48NM	