

Intelligent Toll/Parking Barrier Gate

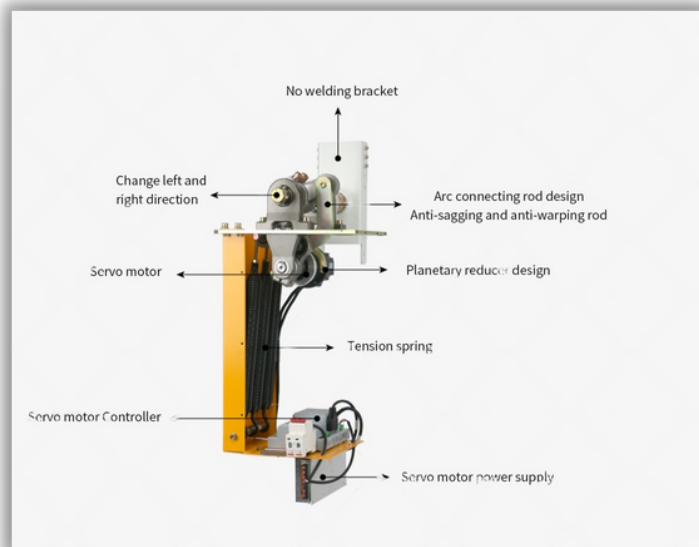
Entrance Automation



The Nirmal Automation servo motor gate features an integrated design and mold manufacturing using leading international technology. It offers a compact structure, high precision, consistency, and standardization. The system uses a planetary reducer transmission for high efficiency, long life, no oil leakage, no blockages, and low noise. The motor is a 24V permanent magnet rare earth synchronous servo motor, known for its small size, low power consumption, high torque, wide speed range, no heat buildup, minimal penetration, and precise limits. It is controlled by a digital signal processor (DSP), enabling complex algorithms, networking, and intelligent functions. The integrated internal drive circuit (IPM) can detect faults and display error codes for quick troubleshooting. The three-bar linkage design ensures fast rising and stable lowering of the gate. Additionally, the system supports solar charging applications, making it ideal for unmanned locations such as railway crossings, fire passages, oil stations, and mine tunnels, operating without electricity for fully automated control.

Intelligent Toll/Parking Barrier Gate

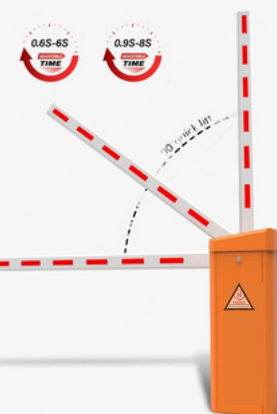
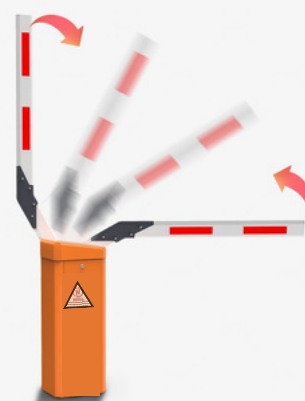
Nirmal Automation servo motor gate adopts integrated design and mold manufacturing with international leading technology, compact structure, high precision, high consistency, and standardization, and uses planetary reducer transmission, high efficiency, long life, no oil leakage, no blocking, low noise, the motor adopts 24V permanent magnet rare earth synchronous servo motor, small size, low power consumption, large torque, wide speed regulation, no heat, small penetration, precise limit, etc., using a digital signal processor (DSP) As the control core, it can realize more complex algorithms, realize network and intelligence, (IPM) internal integrated drive circuit can detect faults and display fault codes to quickly solve fault problems. The three-bar linkage design of the machine core makes for the rapid rise and stable fall. Using solar charging applications, it is suitable for unmanned occasions such as railway crossings, fire passages, oil stations, mine tunnels, etc., without electricity, and fully realizes automatic operation control.



Function

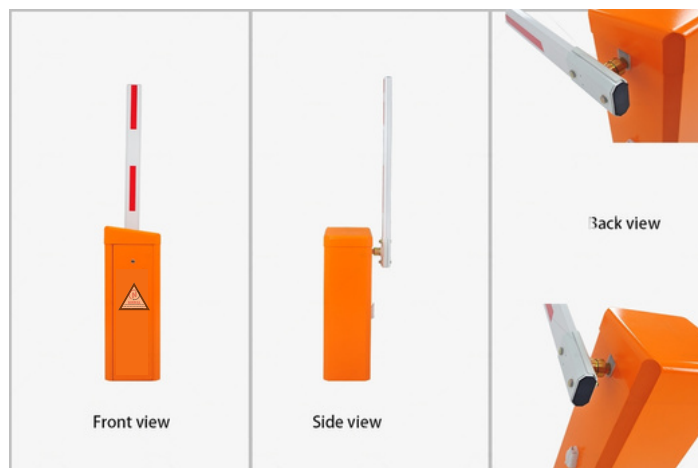
1. Open and close speed adjustable
2. Arm direction Left and Right can change easily
3. When power is off, manually open and close the arm, and lock itself.
4. Wireless remote
5. Photocell I/O port output
6. Loop detector anti-collision I/O output
7. Open and close control input
8. 12V traffic light output
9. Traffic light signal output
10. Open and close the limit signal output
11. Counting (fleet) input RS485 communication input
12. 24V battery input port
13. Delay close arm function(1-300 sec. Adjustable)
14. Open and close arm speed deceleration function
15. One-key setting arm type with corresponding speed
16. Arm auto-reverse function (Force adjustable)
17. Anti-collision alarm function
(additional sensors and alarms are required)
- 18.RS485 communication output

1. Adjustable open and close speed
2. Easy switching of arm direction (Left or Right)
3. Manual operation to open and close the arm when power is off, with automatic locking
4. Wireless remote control
5. Photocell I/O port output
6. Loop detector anti-collision I/O output
7. Open and close control input
8. 12V traffic light output
9. Traffic light signal output
10. Open and close limit signal output
11. Counting (fleet) input with RS485 communication
12. 24V battery input port
13. Adjustable delay close arm function (1-300 seconds)
14. Speed deceleration function for arm opening and closing
15. One-key arm type setting with corresponding speed
16. Auto-reverse arm function (adjustable force)
17. Anti-collision alarm function (additional sensors and alarms required)
18. RS485 communication output



Technical Specification

Working Temperature	-30°C~+70°C	-30°C~+70°C
Power Supply	24/100/240VAC, 50/60Hz	24/100/240VAC, 50/60Hz
Open/close Speed	0.9Sec-8Sec(Adjustable)	0.6Sec-6Sec(Adjustable)
Rated Power	200W	400W
Driving Method	Servo motor	Servo motor
Humidity	≤90%	≤90%
Remote Control Distance	≤100m(open, sunny weather)	≤100m(open, sunny weather)
Protection Grade	IP54	IP54
Motor No-load speed	3000r/min	3000r/min
Max Boom Length	3m-6m	2.5m



About Us

Team Nirmal has been manufacturing, supplying, installing, and servicing entrance automation systems for Industrial, Residential & Commercial uses. During 27+ years of experience, we have built up a strong relationship with our customers by providing reliable & quality products. We, at Nirmal Automation, are proud to contribute to India's growth story since 1994.

27+

Years of
experience

1.2k

Happy
Client

3.4k+

Units delivered
successfully

A FEW ESTEEMED CLIENTS

OUR RANGE OF PRODUCT



GARAGE
DOOR



DOCK
LEVELER



BOOM
BARRIER



SWING
DOOR



AUTOMATIC
SLIDING GATE



BOLLARD



HIGH SPEED
DOOR



ROLLING
SHUTTER



SECTIONAL
DOOR



SLIDING
GATE



SWING
GATE



RETRACTABLE
GATE



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