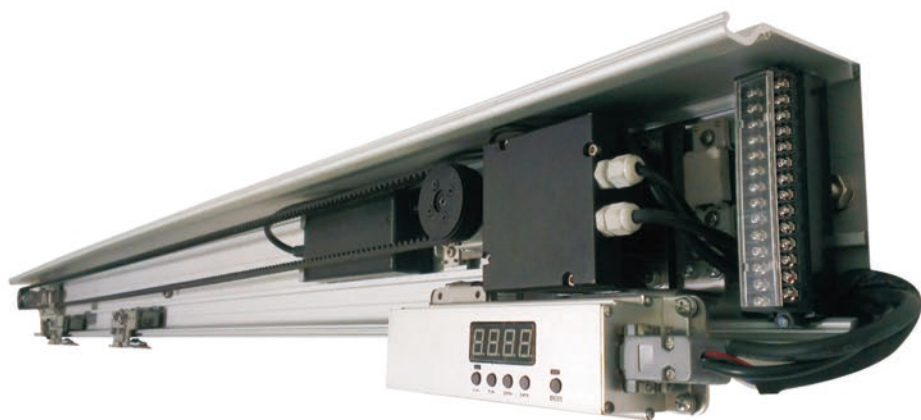


Installation Guide

Version E-06

OA

320kg Heavy Duty Automatic Sliding Door Opener



LOHAS A HOUSE

A3

General Safety Regulations

1. CAUTION! It's important for personal safety to follow all the instructions carefully. Incorrect instruction or misuse of the product may cause people serious harm or damage the equipment.
2. The power supply voltage should be suitable for the demand of the motor and earthing well
3. Before wiring, switch off the electricity supply first.
4. Do regular inspections to make sure the equipment work normally.
5. Do not make any alteration to any components, or it may damage the equipment.
6. We are not responsible for the man-made mistakes during operation or out of limit operation
7. We're not responsible for the safety problem or devices don't work caused by the components which not produced by our factory.
8. Do not allow children or other persons to stand near the gate during installation.
9. The user must refrain from attempting to repair or adjust systems personally and should contact qualified person only.
10. Keep the installation in a safe place for future reference.

Components

- ① A3 Motor X 1
- ② A3 Controller X 1
- ③ Power adapter X 1
- ④ Hanging wheel set X 4 (Dual leaves) / X 2 (Single leaf)
- ⑤ Rear wheel bracket X 1
- ⑥ Positioning block X 2
- ⑦ Belt connection Device (upper & lower) X 1
- ⑧ Tooth belt X 7.5m (Dual Leaves) / X 4.5m (Single Leaf)
- ⑨ 2.1m Aluminum Case X 2 (Dual leaves) / X 1 (Single leaf)
- ⑩ Glass holder with Anti-sway device X 4 (Dual leaves) / X 2 (Single leaf)
- ⑪ Microwave Sensor x 2
- ⑫ Installation guide

* No need glass holder when the door has frame.

Mechanical Installation

1. Features

1. Input voltage AC110V ~ 240V
2. DC24V Brushless Motor - Silent operation
3. Microprocessor controller, Easy settings and adjustments
4. Safety stop when meet obstacles during opening
5. Auto reverse when meet obstacles during closing
6. Adjustable Opening /Closing speed and distance
7. Adjustable Auto close delay time
8. During power failure, doors can be opened manually
9. High-strength aluminum alloy rail track
10. During power failure, the backup batteries can be option for continuous operation
11. Functional switch function: Auto, Open, One Way, Lock, Half Open
12. Optional 2 button remote control: Open/Close & Lock

2. Technical Specifications

■ Electrical

Input Voltage	AC110V~AC240V
Operating Voltage	DC 24V
Electronic Controller	Microprocessor Controller
Motor	DC24V 200W Brushless Motor
Safety Detection	Automatic stop/ reverse during opening or closing
Optional Devices	Microwave Sensor/ Sensor Beam/ Keypad Systems/ Backup Battery/ Functional Switch/ Remote Control/ Magnetic Lock/ etc.

■ Mechanical

Model Number	A3-S/ Single leaf	A3-D/ Double leaves
Door Weight	300kg/ Single leaf	320kg/ 2 leaves
Door Width	700~1700mm	650~1600mm
Maximum Noise	Below 55dB	
Railing Type	High Strength Aluminum Alloy Rail	
Fixed Pulley	Available for easy Installation	
Working Temperature	-25℃~+55℃	

Installation Process

- 1.1 Confirm the motor, controller and components
 - 1.2 Confirm the installation method and position of aluminum case
 - 1.3 Confirm the aluminum case height and horizontal position
-
- 2.1 Cut and fix aluminum rail on the wall or mounted position
 - 2.2 Measure the glass door based on the height of aluminum case
 - 2.3 Confirm the dimension of fixed and moving glass leaf before tempered glasses
-
- 3.1 Install the motor/ controller/ power adapter/ rear wheel bracket/ positioning block
-
- 4.1 Fix the 2 fixed leaves under the steel channel
 - 4.2 Connect the hanging wheel set, glass holder/ connect plate with the moving door
 - A. Connect the hanging wheel set, glass holder with frameless glass door
 - B. Connect the hanging set with framed glass door
 - 4.3 Loosen the stopper of the hanging wheel
-
- 5.1 Fix the anti-sway device on the ground
 - 5.2 Fix the glass door with hanging wheel sets on the aluminum rail
 - 5.3 Repeat step 4.2~4.3 if dual leaves
 - 5.4 Adjust the center, interval distance and height of the door leaf
 - 5.5 Assemble and screw the stopper of hanging wheel set
 - 5.6 Adjust and fix the position of positioning blocks
-
- 6.1 Adjust the length of the tooth belt
 - 6.2 Install the tooth belt
 - 6.3 Adjust the tension of the tooth belt by adjusting rear wheel bracket
-
- 7.1 Wiring the motor and controller
 - 7.2 Batteries Installation (back-up power)
 - 7.3 Wiring the power supply and optional devices
 - 7.4 Adjust the parameters of the controller

Confirm the height and horizontal position of the rail

Cut and fix the aluminum rail

Put the motor, controller, power adapter, rear wheel bracket, positioning block in right position

Fix and assemble the hanging wheel set, glass holder/ connect plate and glass as one part

Fix the hanging wheel with glass holder into the aluminum case and adjust the door position

Tooth belt Adjustment

Wiring and Adjustment

1. 1 Confirm the motor, controller and components
1. 2 Confirm the installation method and position of aluminum case
1. 3 Confirm the aluminum case height and horizontal position

Confirm the height and horizontal position of the rail

Necessary Tools for Installation

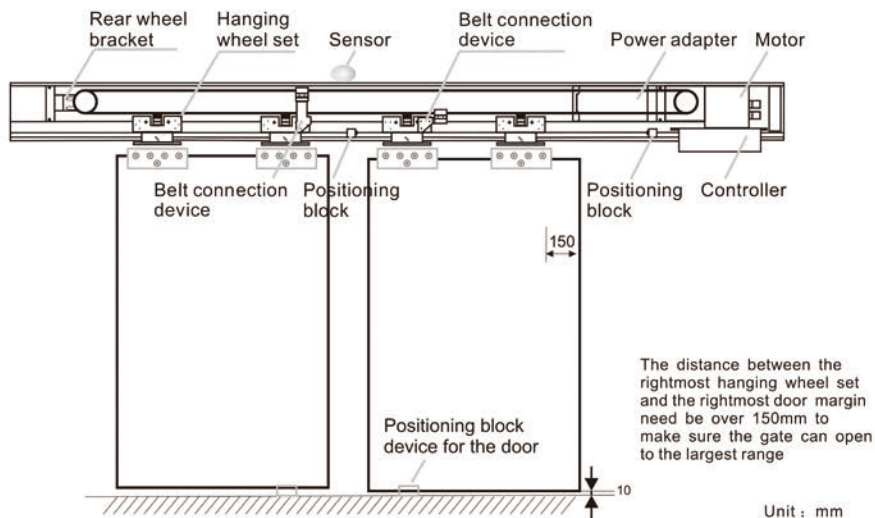
- ① Measuring tape X 1
- ② Spirit level X 1
- ③ Adjustable wrench X 1
- ④ 5# Allen wrench X 1
- ⑤ 13#/ 14# Wrench X 1
- ⑥ 17# Wrench X 1
- ⑦ 6# Allen wrench X 1
- ⑧ Cross screw driver X 1
- ⑨ Small flat head screwdriver X 1
- ⑩ Electric hand drill X 1
- ⑪ Percussion drill X 1
- ⑫ Sander X 1
- ⑬ Self-tapping screw X 8
- ⑭ Ladder X 1



Automatic Door Systems

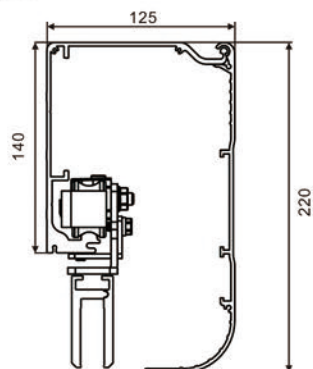
2. 1 Cut and fix aluminum rail on the wall or mounted position
2. 2 Measure the glass door based on the height of aluminum case
2. 3 Confirm the dimension of fixed and moving glass leaf before tempered glasses

Cut and fix the aluminum rail

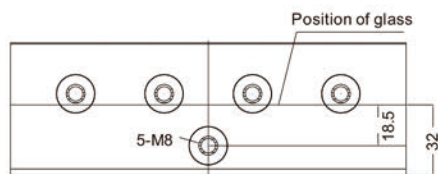


- *The fixed door leaf should be wider than movable door leaf.
The best interval space between the leaves is 3~10cm

Side View of Aluminum Case

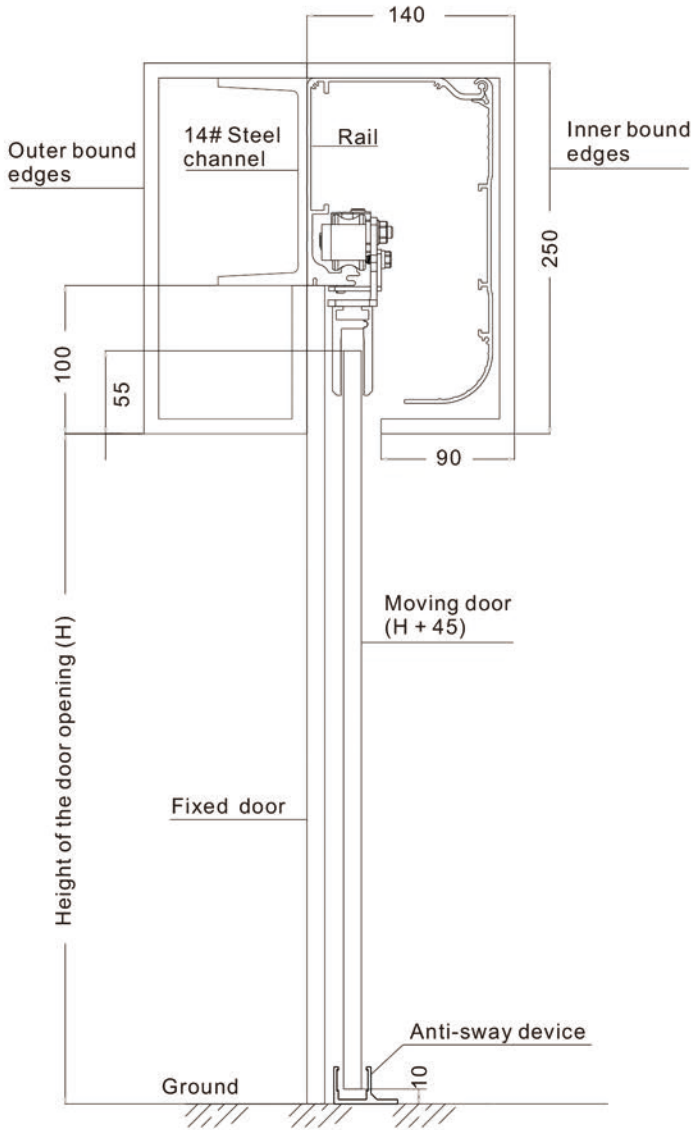


Glass Holder



Unit : mm

Cross - sectional view

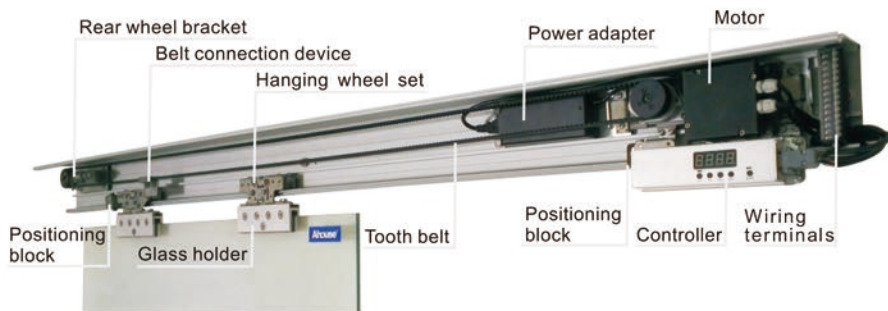


Unit : mm

* Height of the moving door = $H + 45$ mm

3.1 Install the motor/ controller/ power adapter/ rear wheel bracket/ positioning block

Put the motor, controller, power adapter, rear wheel bracket, positioning block in right position

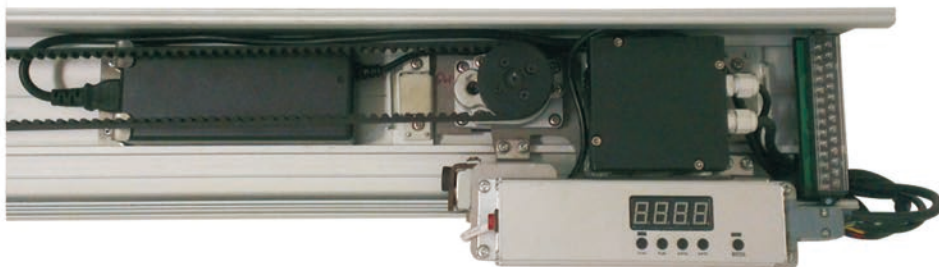


* Installation position for positioning block :

If dual sliding, one installed in the middle of the rail for fixing position when closing the two doors, the other install beside the motor for fixing position when opening.

If single sliding, install the blocks on both sides of the movable door leaf.

As shown, put the motor ,controller, Adapter in the suitable position and tighten the screws.



4.1 Fix the 2 fixed leaves under the steel channel.

- * Make sure to fix the fixed door leaves steadily. Then get it as close as possible with the steel channel in order to reduce the interval space between the fixed and movable doors to obtain the best installation result.

Fix and assemble the hanging wheel set, glass holder/ connect plate and glass as one part

4.2 Connect the hanging wheel set, glass holder/ connect plate with the moving door.

A. Connect the hanging wheel set, glass holder with frameless glass door.

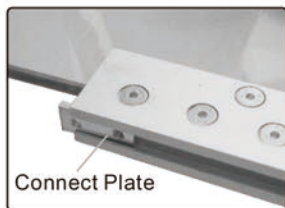
A-1 Fix the glass holder on the moving door.

A-2 Put 2 pcs connect plate into the glass holder.

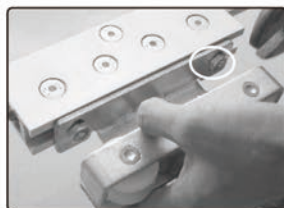
A-3 Connect the hanging wheel set and glass holder, then tighten the screws.



A-1



A-2



A-3

B. Connect the hanging set with framed glass door.

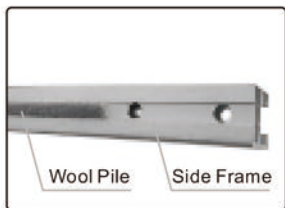
B-1 Put the wool pile into the side frame, cut it 1cm away from the screw hole. Put the black rubber strip into the bottom frame.

B-2 Connect the side frames, bottom frame and glass.

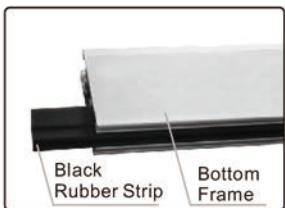
B-3 Put 4 pcs connect plate to the top frame, connect the top frame and B-2 glass and frames, tighten the screws.

B-4 Seal glass glue around the glass and frames.

B-5 Connect hanging wheel set and connect plate, tighten the screws.



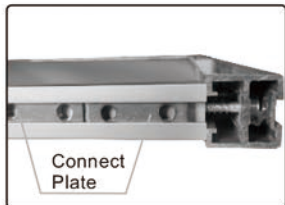
B-1



B-1



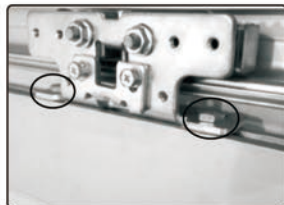
B-2



B-3



B-4



B-5

4.3 Loosen the stopper of the hanging wheel.

- 5.1 Fix the anti-sway device on the ground
 5.2 Fix the glass door with hanging wheel sets on the aluminum rail
 5.3 Repeat step 4.2~4.3 if dual leaves
 5.4 Adjust the center, interval distance and height of the door leaf
 * If needed to adjust height or interval distance of the door, firstly is to loosen the " Fixed Screw ", then rotate and adjust " Adjustable Screw " of the hanging wheel set
 After adjustment, wrench tightly the " Fixed Screw " of the hanging wheel set
 5.5 Assemble and screw the stopper of hanging wheel set
 * After confirmed the position of the door leaves, move the door leaves and check the distance between the Anti-drop plate and rail, make sure the distance is 1-3mm, if not , adjust the "Block Screw"

Fix the hanging wheel with glass holder into the aluminum case and adjust the door position



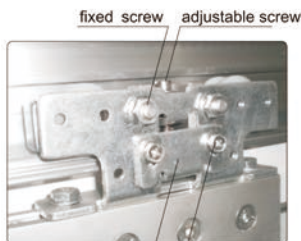
5.1 Fix the anti-sway device (frameless glass door)



5.1 Fix the anti-sway device (framed glass door)



5.2



5.4 Anti-drop plate the wheel block screw



5.5

- 5.6 Adjust and fix the position of positioning blocks



Positioning block



Use wrench to tight the positioning block

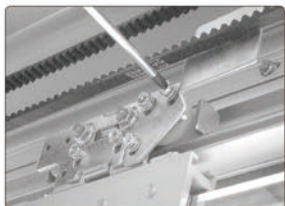
- 6.1 Adjust the length of the tooth belt
- 6.2 Install the tooth belt
- 6.3 Adjust the tension of the tooth belt by adjusting rear wheel bracket

Tooth belt Adjustment



6.2

*According to the upper-left and lower-right position principle during installation the tooth of belt



You can adjust tension of the tooth belt from the "Tooth Belt Adjustable Screw". After adjustment, remember to wrench tightly the "Adjustable Screw" of the rear wheel bracket

*Make just right during wrench tight tooth belt. Too tight or too loose will damage the belt, will also increase the noise during operation



6.3

The rear wheel seat adjustable screw Tooth belt adjustable screw

- 7.1 Wiring the motor and controller
- 7.2 Batteries Installation (back-up power)
- 7.3 Wiring the power supply and optional devices
- 7.4 Adjust the parameters of the controller

Wiring and Adjustment

Wring

7.1 Wiring the motor and controller



* TO Protect against fire and electrocution:
DISCONNECT power BEFORE installing or servicing operator

7.2 Batteries Installation (back-up power)



Battery Maintenance

Before use the batteries, please make sure that they are fully charged, it will lead to wrong operation if it is not fully charged, and need to check or replace the batteries by qualified person on a regular time basis.

- * Using 2 x 12V 9Ah batteries in series .
- * Battery is consumable, suggest to change battery every 9 or 10 months.

7.3 Wiring the power supply and optional devices



A3 Wiring Diagram

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Description	0V	+15V	Open	0V	+24V	Open	+24V	Open		COM	0V	Open	Half Open	signal (off)

Keypad	•	•	•											
Sensor Beam				•	•	•								
Microwave Sensor I / II				•	•	•								
Microwave Sensor II With Remote Control/ Functional Switch							•	•	•		•			
Functional Switch							•			•	•	•	•	•
Wireless Touch Switch				••	•	•								

Item	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Description	0V	+24V	0V	Open/ Stop/ Close	Signal (off)	0V	OUT	+24V	0V	+24V	+24V		Open/ Stop/ Close	0V

Remote Control	•	•	•	•	•	•								
Magnetic Lock							•	•						
Backup Battery									•	•				
Push Button													•	•

7.4 Adjust the parameters of the controller

Function Debug Form

ITEM	Description	Setting Range	Factory Default Setting
0	Overload detection	0--60	Defect setting : 25 small number, more sensitive
1	Braking force for gate closing with fast speed movement when overload or sensed	0-30	Default Setting : 0
2	Gate opening speed	0--60	Default Setting : 20
3	Gate opening with slow speed	0--60	Default Setting : 25
4	Gate closing speed	0--60	Default Setting : 20
5	Gate closing with slow speed	0--60	Default Setting : 25
6	Moving force for slow speed movement	0--99	Default Setting : 38
7	Automatic closing delay time after opening	0--99	Default Setting : 3S (0-99)=Delay time 0-99 seconds automatic closing after opening
8	Direction of motor movement (when make wrong connection of +/- main power, you can make it reverse by this setting)	0--1	Door opening direction
A	Impact force adjustment after full door closed	0--60	Default Setting : 28
B	The interval distance between the two movable leaves	0--99	Default Setting : 32
C	System allocate speed for low speed and fast speed movement during learning mode when power on	0--60	Default Setting : 35
D	Electric lock parameter	0--1	Default Setting : 0 0=without electric lock 1=with electric lock
E	Software version		
F	Restore default setting		Default Setting : 0 09=restore factory settings

1. Setting Mode:

Press and hold the "FUN+" button on the controller around 2 seconds, then start to set parameters.

Press and hold the "DATA+, DATA-" button to set the parameter value, then press "ENTER" to confirm.

2. Exit Setting Mode:

Press and hold "EXIT" button around 2 seconds to exit the setting mode.

3. Testing:

After setting, press "TEST" to test the parameter values.



Optional parts for automatic door



Microwave Sensor



Glass Holder



Magnetic Lock



Keypad



Fingerprint Access Control



Push Button



Hand Sensor Switch



Functional Switch



Automatic switch for the disabled



Wireless Touch Switch



Pedal Inductive Switch



Remote Control



Backup Battery



Sensor Beam



Time Switch



Waterproof Keypad System



Wireless Touch Switch



Emergency Switch



Glass Door Lock



Door Magnetic Switch



Key Switch

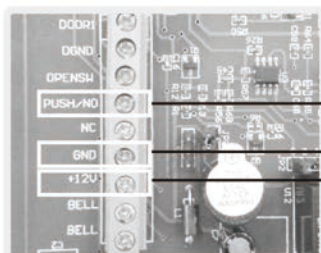


Alarm



Passive Infrared Sensor

Wiring for Optional Parts



- Open 3
- 0V 1
- +15V 2



Keypad



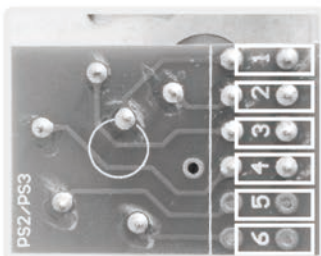
- Yellow/ Red (1, 4) wire — 0V 4
- Red wire (3) — +24V 5
- Yellow wire (2) — Open 6

Microwave Sensor II With Remote Control/ Functional Switch

- Red wire (3) — +24V 7
- Yellow wire (2) — Open 8
- Red wire (4) — 9
- Yellow wire (1) — 0V 11



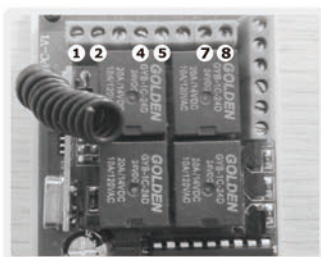
Microwave Sensor



- 0V 11
- Signal (off) 14
- +24V 7
- COM 10
- Half Open 13
- Open 12



Functional Switch



- 1 — 0V 15
- 2 — +24V 16
- 4 — Open/ Stop/ Close 18
- 5 — 0V 17
- 7 — Signal (off) 19
- 8 — 0V 20



Remote Control

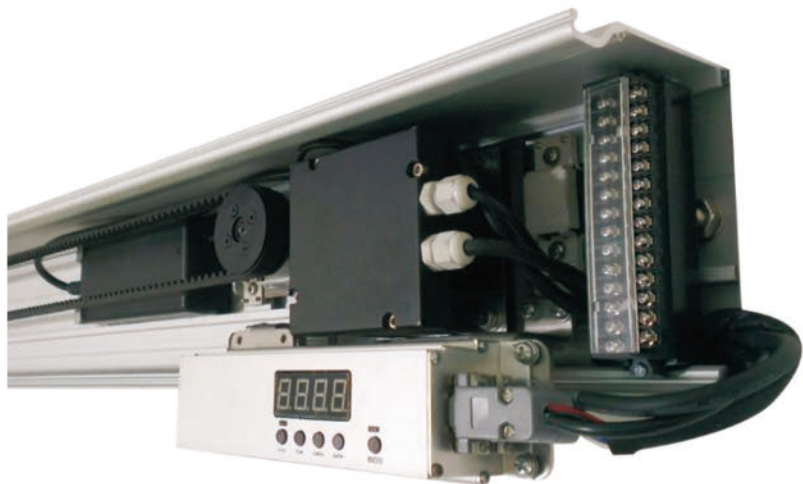
Memo



Automatic Door
Systems

OA

320KG Heavy Duty Automatic Sliding Door System



DC 24V Brushless Motor-Silent operation

Microprocessor controller, Easy settings and adjustments

Safety stop when meet obstacles during closing

Adjustable Opening/ Closing speed and distance

High-strength aluminum alloy rail track

Optional Parts: Microwave Sensor/ Keypad System/ Push Button/ Functional Switch/ Remote Control/ Battery/ Magnetic Lock etc.

Functional Switch Function: Auto, Open, One Way, Lock, Half Open

Optional 2 button remote control: Open/ Close & Lock

