

**BR600T\_90 Intelligent Vehicle Barrier Gate**

WWW.MAG.COM.MY



## Description

BR600T\_90 support 90° folding arm to accommodate low height ceiling such as basement parking and multi level parking. BR600T\_90 design is optimized to be highly affordable for commercial, residential and industrial application.

MAG intelligent barrier uses digital electronic motor counter to ensure that the arm opens and closes perfectly EVERY TIME. Built in optical sensor as redundant safety ensures arm never fail. Electronic parts is not subject to wear & tear and therefore is safer and maintenance free.

## Application

Suitable for indoor as well as outdoor parking area at airport, shopping mall, warehouse, hotel, factories, condominium, car rental companies, etc. It can also be customized to be used together with any auto-pay ticketing parking or access control system.

## Features

- 1. Intelligent.** Advanced smart motor control system is combined with unique lever design to achieve swift arm movement that reduces bouncing at end position.
- 2. DSP Dual Spring** mechanism to achieve two times smoother arm motion. Combination of different tension force reduced vibration as the arm stop. Well balanced arm weight reduces the possibility of broken spring thus reducing down time.
- 3. DSD Dual Sensor Detection** to achieve double safety. Innovative design monitors current spike and motor rotation simultaneously to auto-reverse arm if blocked by obstacle. This is an important safety feature to prevent further damage in the event when arm hit car or pedestrian.
- 4. BlueSpeed motor** uses lowest possible rotation speed (RPM) with our force rotation ratio technology to achieve high speed opening. This reduces mechanical wear and effectively eliminates any maintenance servicing on the motor.
- 5. Improved air ventilation.** New fan design located at top instead of sideways. This allowed cool air enter from bottom and exit from top to achieve more efficient cooling this enabling BR600T series to support higher flow of traffic.
- 6. Improved NLSV2 design.** NLS V2 is using magnet sensor instead of optical sensor. Optical sensor is subjected to interference from ambient light level. New NLS design removed all blind spot area to achieve perfect opening and closing consistently.

**7. Safe.** Arm will auto-reverse when hitting an obstacle during closing. Photo beam can be added to auto-reverse the arm ahead of time before hitting approaching vehicle or human. Arm will swing out during direct collision from front avoid arm frequently broken (only available in BR618T and BR630T).

Traffic light (red & green) can be added to indicate permission to pass through and further enhance safety usage. Built-in MCB to protect against any electric hazard.

**8. Heavy Duty.** Enhanced NLS design eliminates the use of mechanical limit switch thus reducing mechanical wear and tear. Innovative counter weight spring design avoids possibility of motor over-stressed and break due to high volume continuous open/close cycle. All these allow BR600 to work harder and work longer for you.

**9. Fast speed.** BR618T's 1.8 sec fast opening / closing speed allow more car to pass through faster thus effectively reducing congestion during peak hours.

**10. User Friendly.** In the event of power failure, arm can be easily lifted up by insert a key from outside to unlock the clutch. There is no need to open up entire casing to avoid any vandalism attempt of internal parts.

**11. Easy maintenance.** Epoxy powder paint will keep the unit looking clean and new for years. Damaged barrier arm can be replaced easily. AC based motor is stronger and maintenance free (no need to change carbon).

## Technical Parameter

### Mechanical Unit

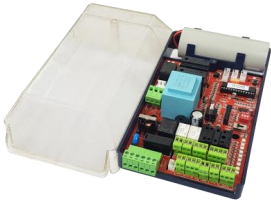
Consist of the drive motor, speed reduction gear box and casing. Control panel is mounted into mechanical unit casing as a complete system that drives the arm movement. Casing is made with electroplated mild steel and finished with epoxy powder paint. The top cover and door on casing is cam locked (requires key) to avoid tampering with the internal system. The following is the parameter for complete system:

Motor	MAG Bluespeed AC motor
Max starting torque	Max torque : 1 second : 1.4±0.2 N.M   3 / 6 second : 2.1 ± 0.1 N.M
AC rotation speed	AC rotation speed :1 second : 900 ± 50 RPM   3/6 second : 460 ± 40 RPM
Mechanical temperature	-40° to 75 C
Electrical temperature	-10° to 75 C
Power supply input	220V ± 10% AC, 50/60Hz
Power consumption	80 watt - 1.25A @ 240V
Starter	Starter Capacitor 9+9µF 450VAC
Relative humidity	< 90 %
Arm speed	1.8 second, 3 second
Internal lubrication	Grease
IP rating	IP44
Cycle before failure	4 million cycle ( approximately 5.5 year )

Built in spring mechanism to counter balance arm's weight allow for effortless motor drive and longer mechanical life span.

## Control panel

Consist of advance intelligent microprocessor based board and transformer housed in a weather resistant plastic casing. It controls the operation of the barrier system.



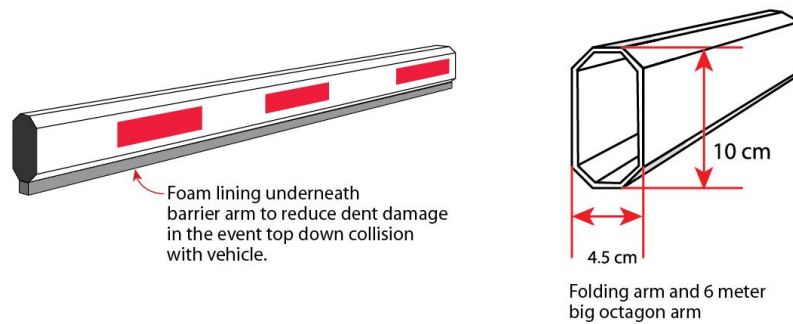
### Function:

- Support 2 type of speed - 1.8 , 3 second
- Support separate push button for opening , closing and stop
- Support motor encoder sensor
- Support traffic light (red - green) output AC230
- Optical slot sensor to control up and down limit

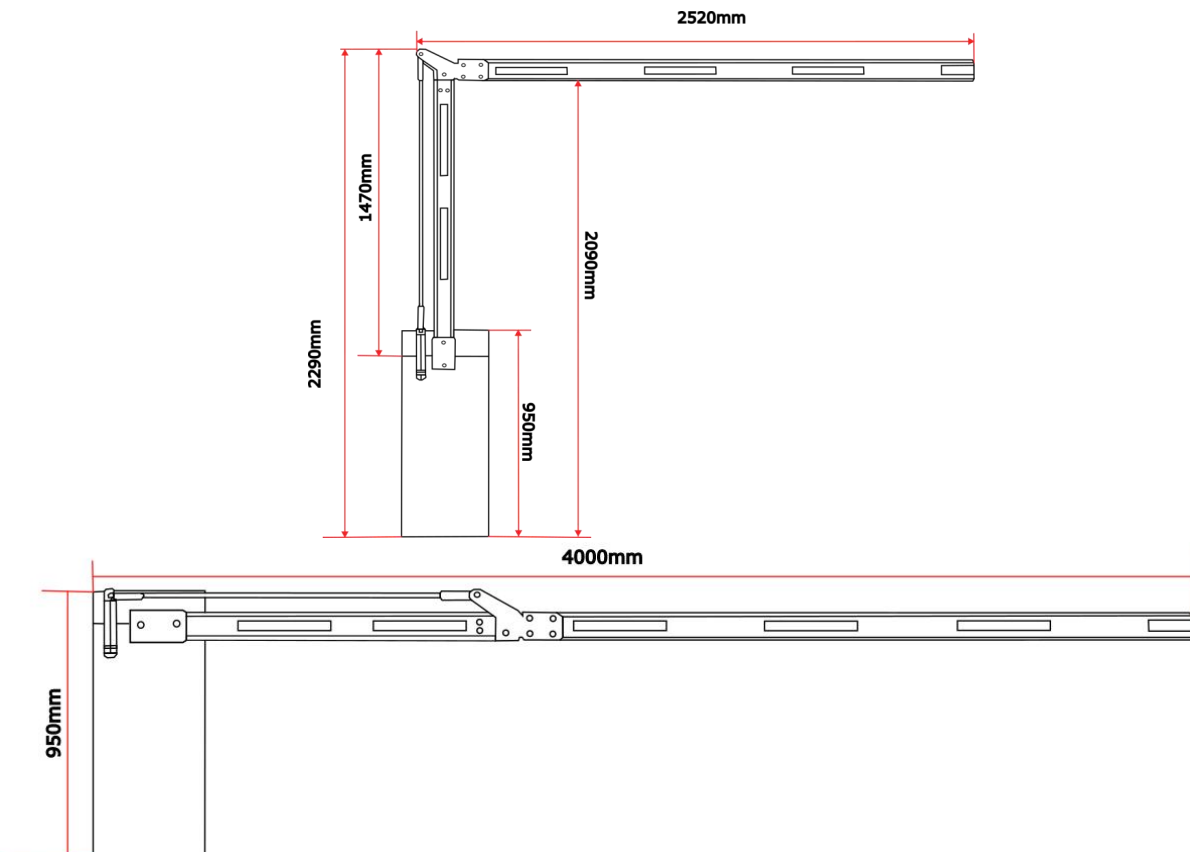
Casing is made from weather proof ABS plastic.  
Casing dimension: 211mm x 95mm x 118mm

## Barrier arm

Arm is made of octagon aluminum hollow. There are standard lengths available: 4m. Other customized length is also available upon request. Red reflective adhesive is put onto the arm alternately for better visual during night time.

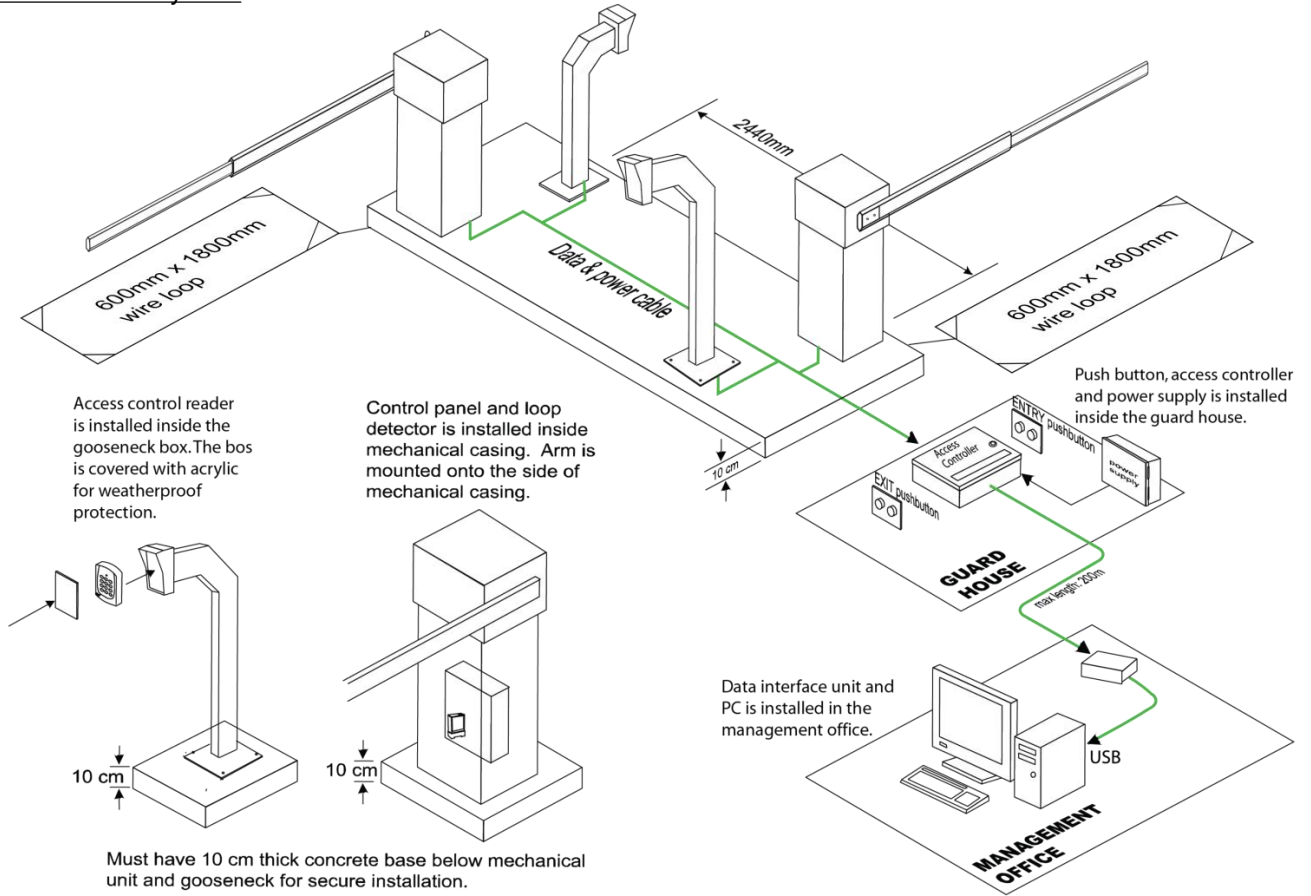


## Dimension drawing



# Typical installation

With access control system

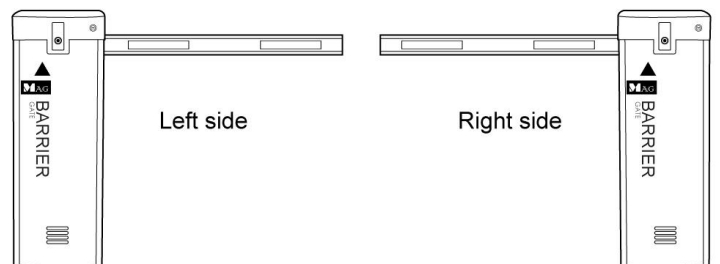


\*\*Diagram is for illustration only and does NOT reflect actual installation. Actual installation dimension varies depending on site.

# Ordering information

Ordering code:

Model No.	Description
BR618TL_90	Left Side Arm
BR618TR_90	Right Side Arm
BR630TL_90	Left Side Arm
BR630TR_90	Right Side Arm
GSSD	MAG Gooseneck



## Packaging information

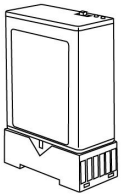
Standard color body is gray, top cover is dark gray in color. A complete system consists of:

- 1 pcs Standard AC 230 Motor
- 1 pcs Control panel and MCB switch
- 1 set Aluminum Arm
- 2 pcs U bracket for base mounting
- 4 pcs Raw bolt screw

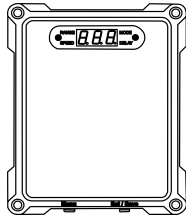
The following is the approximate weight information of major components to help estimate shipping cost.

Items	Weight
Mechanical unit and control panel	75 kg
Gooseneck	9 kg
4 meter folding arm	8 kg

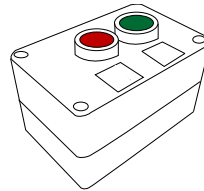
## Optional accessories



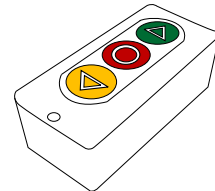
**MAG BRD05**  
Single channel loop detector. Detect presence of vehicle. With feature of Extra Wide Inductance (EWI)



**MAG BRD03**  
DualRay and LED Display Vehicle traffic detector. Detect presence of vehicle and pedestrian.



**BR\_PB2**  
Heavy duty push button for manual open and close.



**BR\_PB3**  
Light usage push button for manual open, stop and close.

**\*Product performances is based on testing in a controlled environment. Your result may vary due to several external and environment factors.**



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