digital
qdigital.mx

Teléfono (33) 3650-1777
Av. Lázaro Cárdenas 2305 Local E18
Col. Las Torres Plaza Comercial Abastos
C.P. 44920 Gdl, Jal.

Product Catalog

Parking Guidance System

Market Background

Along with the rapid growth of car flow in urban area, parking became more and more like a pain , especially in downtown , shopping centre and commercial centre . Drivers sigh, complain and circle around to find no space left but only to increase the burden of road traffic.

Working Principle

Parking Guidance System monitors , collects parking status and displays these information on LED guiding panel to indicate drivers parkinglot information such as: parking ot name, location, available spaces,and the shortest route to the parking lot.

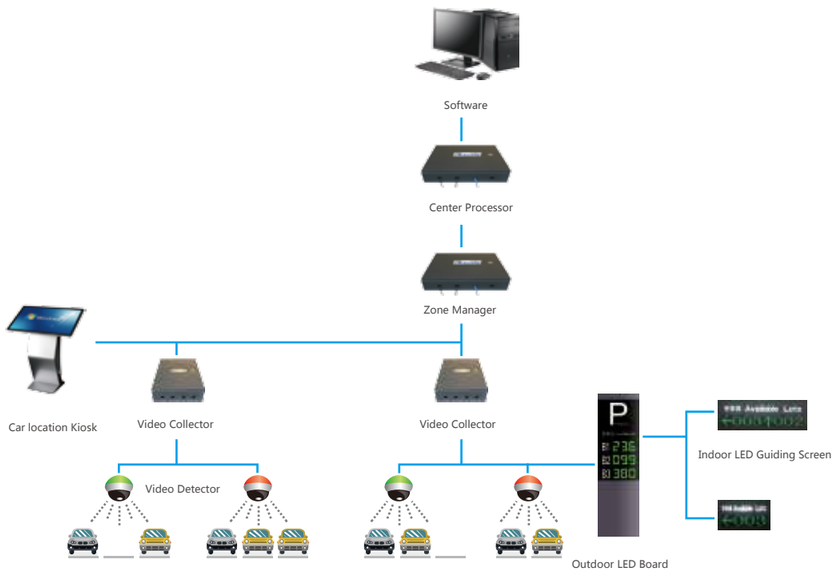
Application

Parking Guidance System is widely applied to indoor parking lots of office buildings, hotels,stations,airports,shopping centers and so on.

Intelligent Video Parking Guide / Reverse Searching System

The Intelligent Video Parking Guidance system can solve the two major problems of difficult parking and difficulty in car parking because of the large space in the parking lot, the large number of parking spaces, and the fact that the environment and landmarks are not easily distinguishable.

Intelligent Parking/ Searching System Drawing



Video Detector

Video detector integrates video camera and indicator, install in front of every stall, work with multipath video processor to recognize the stall status and plate number, meanwhile control the stall indicator to show the stall status.

Products Spec.			
Camera	processing element	Huawei Hass License Plate Recognition Chip	
	Sensor Style	1/3" CMOS Image Sensor	
	Camera	3.6mm（M12）	2.8mm（M12）
Image	Image	JPEG	
	Resolution	1280x720	1920x1080
	Video Frequency	H.264，720P，25Fps	
	Detect parking spaces	2P	3P
Function	Color of indicator	Red, Blue and Green	
	Unlicensed vehicle detection	Support	
	Car accounts for multiple alarms	Support	
	Bypass	Support	
Performance	License Plate Recognition Type	Any License in China	
	Parking detection accuracy	≥99%	
	License Plate Recognition Accuracy	≥99%	
	Parking space detection time	≤5(s)	
	License plate checkout time	≤5(s)	
Port	Port	2，RJ45 10M/100M	
Basic parameter	Working Voltage	DC12V & DC8-26V	
	Power Consume	≤3W	
	Ambient Humidity	10%~90%	
	Working Temperature	-30℃~70℃	
	Installation	Hemispherical design, Ceiling mounted installation Way	

Features and advantages

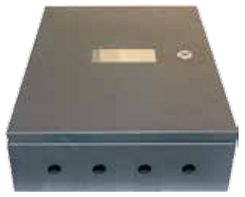
- The concept of the system is to pinpoint unoccupied parking space and lead drivers to park in no time
- Video camera and indicator light be integrated together, or separated, one camera can recognize 2 or 3 parking space, reduce construction cost.
- Every Camera above parking space can capture real-time image to show the stall state, recognize the plate number exactly about 99%, support reverse searching.
- Adopt the car-use ultralow luminance camera, has a wide temperature, wide voltage, long lifespan.
- Wide visible angle design, the material we use can diffuse the light to realize the gentle and uniformity of indicator light.
- Multi rotation angle design, compatible with multi focal lens to facilitate installation, shooting angle is better.
- Internet access recombination bus, integrate power supply, video transmission and signal control on one cable. Reduce the cost.

Center Processor

The Center Processor is the heart of the whole system, mainly collecting all the data of the whole PGS and controlling it as to act as guidance and indication

Working Voltage	AC100-240V	Mac Address	4K
Ambient Temperature	-40~70℃	Ambient Humidity	10%~90% RH
Port	24 pcs 10/100M Base-T (Auto MDI/MDIX)	Standard Protocol	IEEE802.3 IEEE802.3u, IEEE 802.3X
Power supply lightning protection	6Kv	Size	294mmx278mmx44cm

Video Collector



Video Collectors, which manage their detect units in groups and optimize network communication , inspect detect status in their range and transmit all concerning information to the Switch.

Working Voltage	AC220V	Power	320W
Ambient Temperature	-0~40℃	Ambient Humidity	10%~90% RH
Storage Temperature	-40~70℃	Storage Humidity	5%~90% RH
Port	24 pcs 10/100M	Size	20cm*12cm*4.5cm

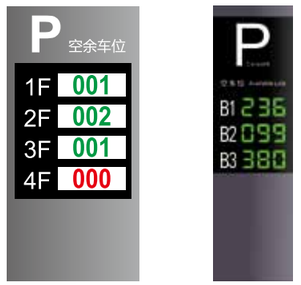
LED Guiding Display

LED screen for parking lots available is an essential part of PGS, displaying information on parking status of the system. PGS is mainly made up of LED screens which are installed separately at the entrance, each floor , each zone and each passage of parking lots.

Specification of Indoor LED Guiding Screen

Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	53cmx28cmx12cm 106cmx28cmx12cm 159cmx28cmx12cm		
LED Size	℄5 12cm(24cm)x48cm		

Specification of Outdoor LED Board



Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	Customization		
LED Size	PH10 16cmx32cm		

Car location Kiosk

Searching terminal is the imaging searching device of reverse car searching system,mainly installed in the entrance to a parking lot. Can find the car easily.

Working Voltage	AC 220V	Display type	LC
Display size	17-20 inch	Input device	Infrared touch screen
Network port	RJ45 RJ11	Housing material	cold steel
Working temperature	-15～+60℃	Max resolution ratio	1400 x 800

Software

Center management system is developed on the basis of Windows,adoping database software Microsoft OfficeAccess 2003 and with friendly interfaces. It is operated simply and functioned very well.

Function Description

Timely display of parking status
Detecting each lot, and displaying constantly the number of the parking lots available. Statistic Function

To know well the status of the whole parking lots by counting the vehicle flow rate and non-availability and parking interval at set time.

Permission
Set up the management password to prevent others from operating.

Remotely monitor and control the wording status of each part of PGS

The software has the function of remote monitoring and controlling the work status of PGS

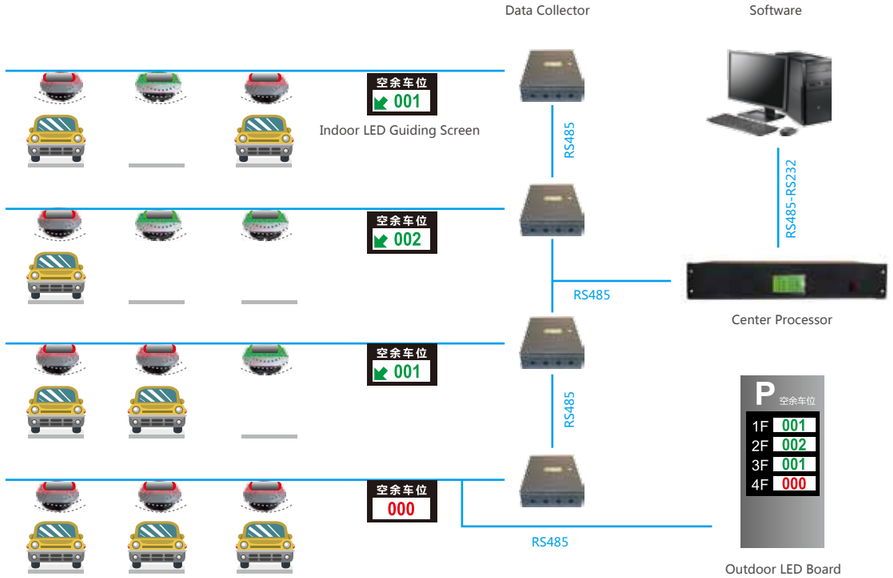
Front ultrasonic Sensor parking guide system

Ultrasonic parking guidance system's working principle is sending ultrasonic waves from the top to the bottom of ultrasonic detectors to detect reflected waves on the roof and the ground,which can correctly detect whether each parking space has vehicles, and then it will sent the information of each parking space to the central processor, the central processor transmits the pilot signal to guide display screen to guide the driver to quickly find the free space.

Working Principle

The system operates through ultrasonic sensors to detect all parking lots, collecting elements to pick all date monitored by ultrasonic sensors,and RS485 data transmission network to transit all data to processing center system. After dealing with all data information, processing center system will save all the information in the manage -ment center software database , and then all the data will be displayed on indicating or guiding boards in parking lost through information display system , such as LED guidance screen , broadcast and network, directing and guiding drivers where parking lots are available.

Parking Guidance System Overview



Front Ultrasonic Sensor

Front Ultrasonic Sensor with LED light

Working Principle: The system operates through ultrasonic sensors to detect all parking lots, collecting elements to pick all date monitored by ultrasonic sensors, and RS485 data transmission network to transit all data to processing center system. After dealing with all data information, processing center

Working Voltage	DC24V	Degree Setting	8 degrades
Peak Current	30mA	Weight	160g
Detecting Method	Ultrasonic wave	Detecting Angle	90° — 175°
Communication Interface	RS485	Ambient Temperature	-25~70℃
Detecting Range	50cm-350cm	Maxi`mum Error	0.2m
Power	8W	Lumen	700-740lm

Data Collector

Collectors, which manage their detect units in groups and optimize network communication ,inspect detect status in their range and transmit all concerning information to the center processor.

Working Voltage	DC24V	Peak Current	8 degrades
Ambient Temperature	-25~70℃	Output Interface	160g
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Material of Casing	ABS Fire-proofed	Size	20cmx12cmx4.5cm
Frequency	4800Mps	Amount of Ultrasonic Sensor it Control	＜60

Center Processor

The Center processor (CCU) is the heart of the whole system, mainly collecting all the data of the whole PGS and controlling it as to act as guidance and indication

Working Voltage	DC24V	Peak Current	150mA
Ambient Temperature	-25~70℃	Output Interface	160g
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Material of Casing	ABS Fire-proofed	Size	20cmx12cmx4.5cm
Frequency	4800Mps	Amount of Ultrasonic Sensor it Control	＜60

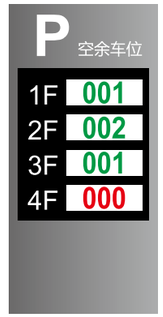
LED Guiding Display

LED screen for parking lots available is an essential part of PGS, displaying information on parking status of the system. PGS is mainly made up of LED screens which are installed separately at the entrance, each floor , each zone and each passage of parking lots.

Specification of Indoor LED Guiding Screen

Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	53cm x 28cm x 12cm	106cmX28cm x 12cm	159cm x 28cm x 12cm
LED Size	¢5 12cm(24cm) x 48cm		

Specification of Outdoor LED Board



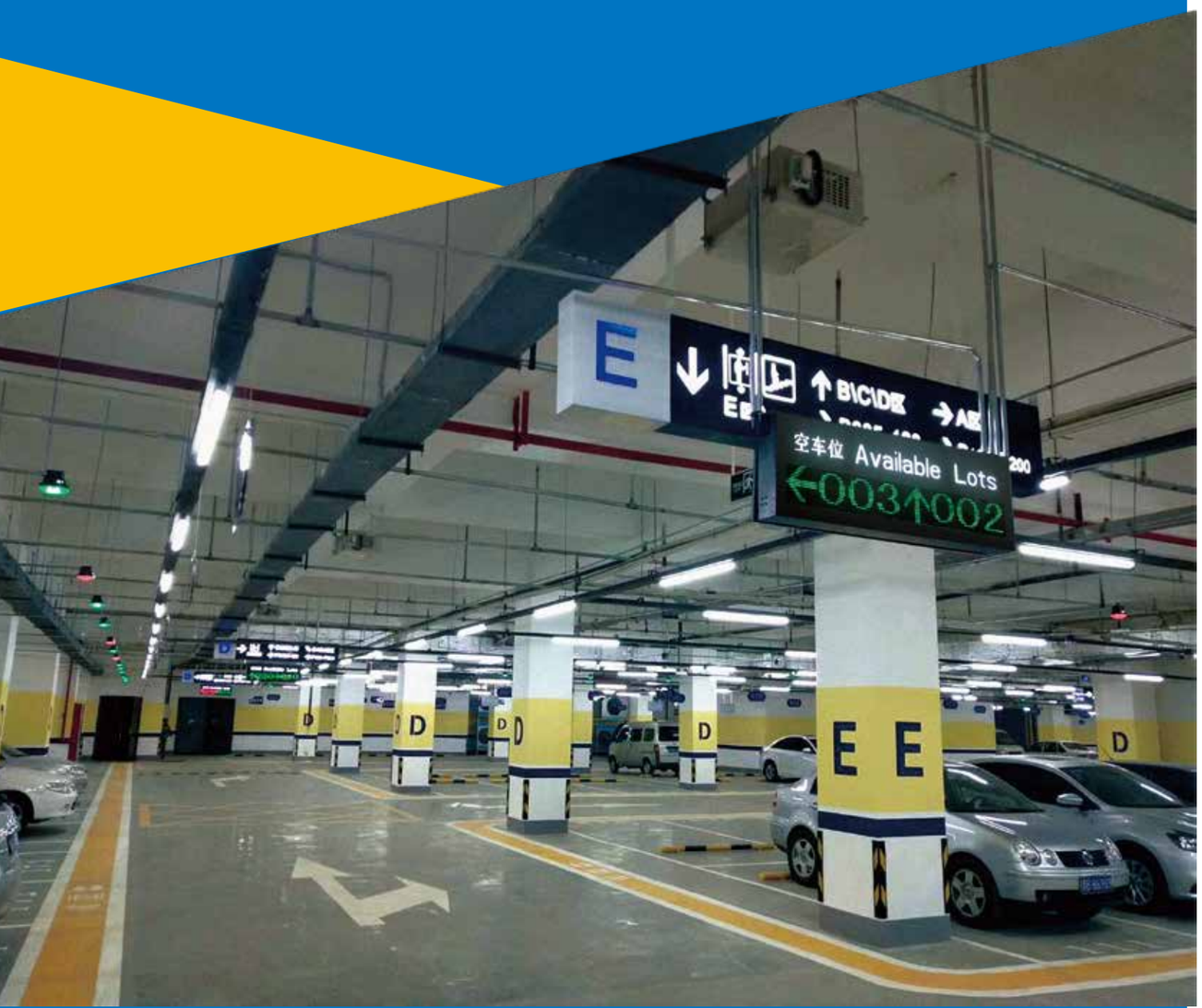
Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	Customization		
LED Size	PH10 16cmx32cm		

Software

Center management system is developed on the basis of Windows,adoping database software Microsoft Office Access 2003 and with friendly interfaces. It is operated simply and functioned very well.

Separate Ultrasonic Parking Guidance System

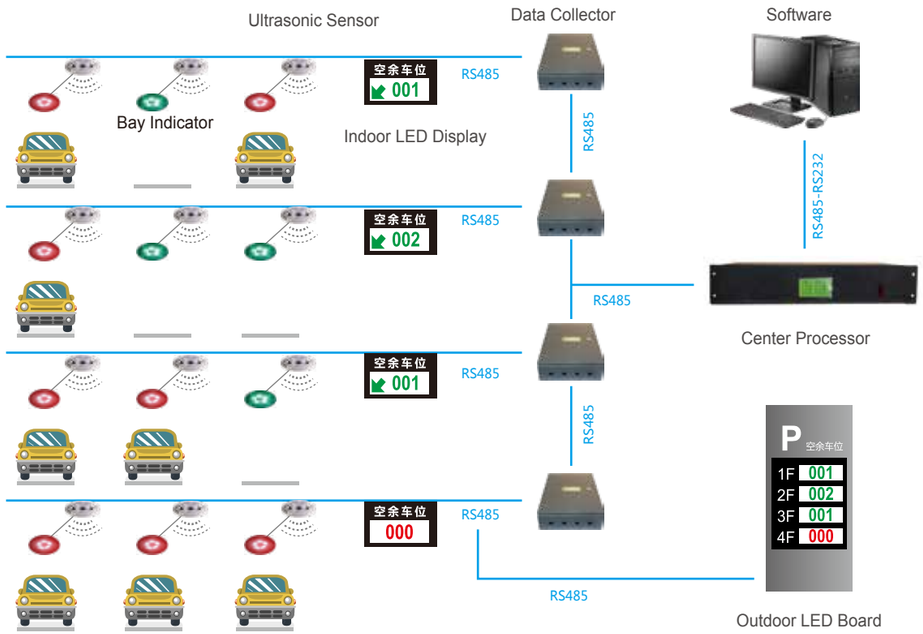
Ultrasonic parking guidance system's working principle is sending ultrasonic waves from the top to the bottom of ultrasonic detectors to detect reflected waves on the roof and the ground, which can correctly detect whether each parking space has vehicles, and then it will sent the information of each parking space to the central processor, the central processor transmits the pilot signal to guide display screen to guide the driver to quickly find the free space.



Working Principle

The system operates through ultrasonic sensors to detect all parking lots, collecting elements to pick all date monitored by ultrasonic sensors, and RS485 data transmission network to transit all data to processing center system. After dealing with all data information, processing center system will save all the information in the management center software database ,and then all the data will be displayed on indicating or guiding boards in parking lost through information display system , such as LED guidance screen , broadcast and network,directing and guiding drivers where parking lots are available.

Parking Guidance System Overview



IP45 / IP65 Ultrasonic Sensor

Basing on ultrasonic detecting technology , ultrasonic sensor monitors the real-time status of parking space and transmits data to Data Collector for later processing . It indicates space availability by green or red LED. Green means this space is available while red means it's not. Built-in LED screen enables it to serve as an indicating as well.

Working Voltage	DC24V	Degree Setting	8 degrades
Peak Current	75mA	Weight	185g
Detecting Method	Ultrasonic wave	Detecting Angle	＜45°
Communication Interface	RS485	Ambient Temperature	-25~70℃
Detecting Range	30cm-400cm	Maximum Error	0.2m
Size	13cm(D)x6cm(H)	Material of Casing	ABS Fire-proofed

Bay Indicator Light

Bay indicating lights are installed above the parking space , controlled by their detect units, and tell drivers timely parking status. When the light turns red , this parking space is occupied ,when the light turns green , this space is available. Drivers can simply tell parking status from the indicating lights and park their cars under the guidance.

Working Voltage	DC24V	Peak Current	75mA
LED	5R5G	Weight	140g
Ambient Temperature	-25~70℃	Size	13cm(D)x6cm(H)
Material of Casing	ABS Fire-proofed		

Data Collector

Collectors, which manage their detect units in groups and optimize network communication , inspect detect status in their range and transmit all concerning information to the center processor.

Working Voltage	DC24V	Peak Current	75mA
Ambient Temperature	-25~70℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Material of Casing	ABS Fire-proofed	Size	20cmx12cmx4.5cm
Frequency	4800Mps	Amount of Ultrasonic Sensor it Control	＜60

Center Processor

The Center processor (CCU) is the heart of the whole system, mainly collecting all the data of the whole PGS and controlling it as to act as guidance and indication

Working Voltage	DC24V	Peak Current	150mA
Ambient Temperature	-25~70℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Material of Casing	ABS Fire-proofed	Size	20cmx12cmx4.5cm
Frequency	4800Mps	Amount of Ultrasonic Sensor it Control	＜60

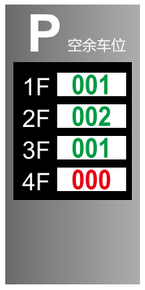
LED Guiding Display

LED screen for parking lots available is an essential part of PGS, displaying information on parking status of the system. PGS is mainly made up of LED screens which are installed separately at the entrance each floor , each zone and each passage of parking lots.

Specification of Indoor LED Guiding Screen

Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	53cmx28cmx12cm 106cmx28cmx12cm 159cmx28cmx12cm		
LED Size	¢5 12cm(24cm)x48cm		

Specification of Outdoor LED Board



Working Voltage	DC5V	Peak Current	≤4A
Ambient Temperature	-25~60℃	Output Interface	RS485(1)(2)
Communication Interface	RS485	Maximum Data Transmission Distance	＜1000m
Board Size	Customization		
LED Size	PH10 16cmx32cm		

Software

Center management system is developed on the basis of Windows,adoping database software Microsoft Office Access 2003 and with friendly interfaces. It is operated simply and functioned very well.

Function Description

Timely display of parking status

Detecting each lot, and displaying constantly the number of the parking lots available. Statistic Function

To know well the status of the whole parking lots by counting the vehicle flow rate and non-availability and parking interval at set time.

Permission

Set up the management password to prevent others from operating.

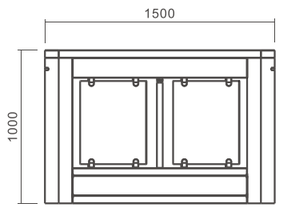
Remotely monitor and control the wording status of each part of PGS

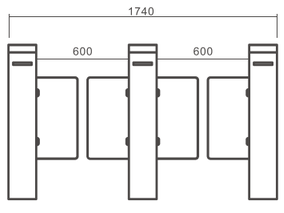
The software has the function of remote monitoring and controlling the work status of PGS

Operation conditions to be recommend or necessary

CPU:≤1.8G RAM:≤1G Hardware:≤80G
Screen:17inch LCD(necessary)
Operating system: Windows XP
surveillance software: Microsoft Office Access2003、Excel2003(necessary)
Connector: one piece of PCI bus cable RS232 COM (male)(necessary)

Speed Through the Security





Function:

- The main device adopts automotive-grade chips, and the rest of the devices use industrial-grade devices to ensure the stable operation of the system.
- Encoder detects the running status of gates and protects pedestrians
- The entire system is operated using mechanical principle positioning device, the operation process is controlled by sensors, no mechanical collision
- CNC machining process, fine surface treatment, nickel plated surface rust prevention
- Standard external electrical interface with opto-electrical isolation
- Movement structure: 24V DC brushless motor + encoder technology + clutch brake
- Access method：AB (A to swipe, B to free pass)
  BA (B is swiping and A is free)
  AA (bidirectional swipe and pass）
  BB（Bidirectional free pass）
- Light Tip: Direction of direction
- Driver: DC24V brushless motor
- Safe mode: Free access after power off
- Application: Government agencies, Financial institutions, High-end office buildings, Hotels and Guesthouses, Corporate office buildings, Scientific research sites, Industrial parks, Leisure and Entertainment venues, Scenic spots, Self-service ticketing systems, etc

Technical Parameters

- Model：BYD-B4-180
- Size：1500x180x1000mm
- Materials：SUS304/2.0mm
- Door wing material: Plexiglass or stainless steel
- Channel width：600-900mm
- Movement temperature rise：△T15°
- Infrared detection：10
- Speed：35/min
- Noise Index：≤55
- Protection Level：IP54
- Working temperature：-15℃- +70℃
- Working environment： Indoor/Outdoor
- Lightning protection level： 3
- Technical indicators:

○ Anti-collision, Anti-clamp；
○ Forced open automatically reset；
○ Single-way switch time 0.5s；
○ Illegal invasion, Reverse traffic, Trailing and other alarms；
○ Service lifetime > 500 million times；
○ Free, Consumer, Commercial three security level model；
○ Can swipe card, Brush ID card, Scan two-dimensional code, Fingerprint opening.。

License Plate Recognition Charging System

Barrier integrated machine economy (ordinary barrier, variable channel gate)

Size：

Length：360mm Width：350mm Height：1346mm

Structural Features

- Waterproof, heavy rain does not affect the recognition;
- Double light, not reflective;
- Double dust
- Barrier + Fill light + Camera + Speaker + Display in one,
- Easy installation and construction;
- The camera is adjusted arbitrarily and does not pick the road

Single-channel gate machine

Size：

Trapezoid section，On the bottom 285mm, Lower end 597mm Length 420mm，The height of the box 1430mm

Structural Features

- Single channel, one gate control out and in;
- Front and rear cameras, screens, speakers, fill lights;
- Waterproof, heavy rain does not affect the recognition;
- Double fill light, not reflective, double dust;
- Barrier + Fill light + Camera + Speaker + Display in one

Easy installation and construction;

- The camera can be adjusted to be 60 degrees from left to right,
- up and down 40 degrees, without picking up the road.
- Ramp and drop speed 1-6 seconds arbitrary adjustment
- Simple wiring, a network cable, a power cable, a flood protection line
  Straight rods, fence rods, folding rods can be satisfied;
- 4.5m fence gate 1.5 seconds from the rod, 6m fence gate 3 seconds from the rod, the rod can be done 7m.

Barrier machine Deluxe Edition

Size：

- Trapezoid section，On the bottom 285mm, Lower end 392mm，Length: 420mm，The height of the box 1430mm

Structural Features：

- Waterproof, heavy rain does not affect the recognition
- Double light, not reflective;
- Double dust;
- Barrier + Fill light + Camera + Speaker+ Display in one

Easy installation and construction;

- The camera can be adjusted to be 60 degrees from left to right, up and down 40 degrees, without picking up the road.

Apple four-line

Size：

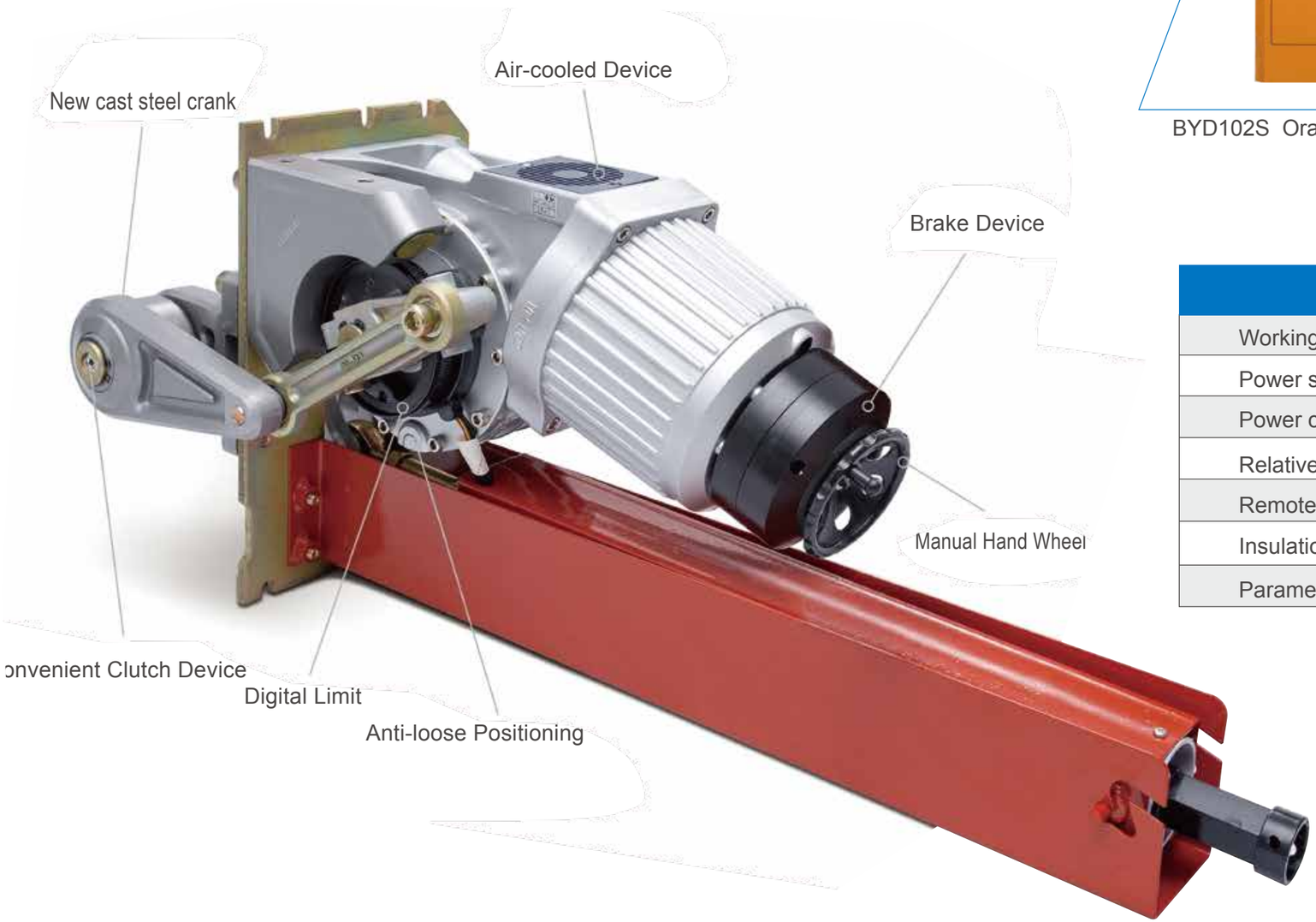
- Length 615mm Rod Diameter 1140mm
- Size of screen：400mm×148mm×600mm

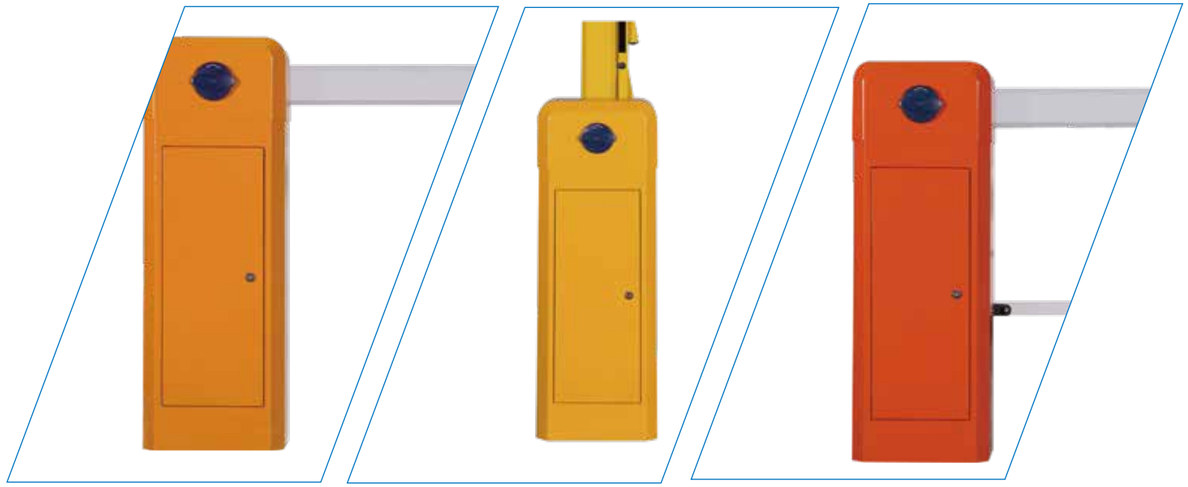
Structural Features：

Easy to walk, Golden ratio, Support offline, Recognition rate 99.9%

Dual Speed Barrier Gate Series

- One barrier can make
- 1/2s or 3/6s compose freely
- Open/close speed is adjustable
- Digital limit
- TCP/IP online is optional





BYD102S Orange　BYD102S Dark yellow　BYD102S Jacinth

Product Parameter	
Working temperature	-35℃— +85℃
Power supply	AC220V/110V±10% 50/60Hz
Power consumption	300W
Relative humidity	≤90%
Remote control distance	≥30（m) open without interference
Insulation grade	F
Parameter choose	direction、seconds、length、 style of arm