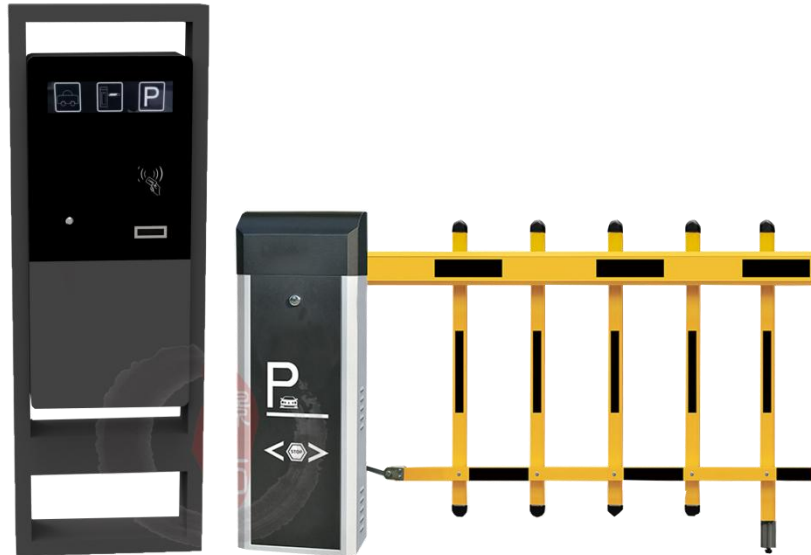


Smart car parking system



Functions & Features

ZT-ZP01 is mainly for parking lot of large traffic flow (such as large office building lot, public parking lot and shopping mall etc). This system is suitable for both temporary and monthly user parking lot. It adopts paper tickets for temporary user and it serves as the evidence of temporary user for in and out.

Low system operating costs, large storage of temporary paper tickets, and visible vehicle enter time and plate numbers is the features of the Barcode type parking system.

Temporary user enters parking lot with the ticket, give the ticket to the security personnel for scanning when exiting, computer displays the fees and after payment, released by the security personnel.

1. Low cost: the system operating cost is low, cost of each ticket is as low as a few determined deposit money.

2. Leading technical maintenance: the leading thermal printing technology; core equipment maintenance. tickets local procurement, which can be bought and then used prior without any prior printing process links, quick and easy replacement.

3. Double messages: the face can be designed, clear admission number, time, vehicle information, and the naked eye can be machine-readable visually.

4. Off-grid operation: the computer billing of the vehicle entering and exiting, with the expansion of a powerful master control system, easy to be off-grid operation.

5. Huge amount of memory card: the ballot box can store more than 500-1000 pieces of cards, unparalleled ease of system operation.

6. Problems solutions: the solution to the current car park management in the operating high costs and the card easily lost problem, and the best alternative to long-standing problem.

7. Wide range of applications: in particular for the car parking lots for large communities, shopping malls, sports centers and other public and various quarters of the reconstruction project.

8. Reliability: print head life is 37 million character row(MCBF), print cutter life is 1 million.

1. Multiple network modes to realize remote data and image transmission.
2. 32-bit ARM dual-core processing technology.
3. Easy to install, debug and maintain.
4. IC, ID, bar code, RFID available in one control board.
5. Nesting function available.
6. Extensible long distance read function.
7. Extensible plate-number identification and auto-printing.
8. Multiple charging mode, charging standards can be defined by the user.

Automatic card dispenser.

9. Voice Notice Available.
10. Flexible system configuration, can be extended to multi-levels parking lot management system.
11. Waterproof, dust-proof and rust-proof case.
12. Modular structure, fully integration.

Working process

- Entering the parking (For Temporary Users)
- Step 1: Driver come to the entry parking machine and press the button. then the ticket dispenser vending an ticket and system record the entry data automatically
- Step 2: Driver get the ticket and the barrier open. after pass the barrier. It will close automatically

- Charging (For Temporary Users)
- Step 1: Driver take his ticket to the payment station. Scan the ticket ,then the Screen will show how long he stayed and how much he need to pay.
- Step 2: User make the payment.

- Exiting the parking (For Temporary Users)
- Step 1: When driver arrive the exit barrier, the barrier will open manually (the guard at the exit or the charging center can open the barrier with the remote controller)
- Step 2: After the driver pass the barrier. the boom will close

Parking Tick System



- For Monthly Users
- Monthly users no need to use the Ticket. these users will take the RFID card on hand all the time and they pay the fees every month. No need every time.

Barrier Dimension	1050*345*295(mm)
Accessories Dimension	1300*340*440(mm)
Housing Material	Steel & Tempered glass
Housing Color	Varied
Support Built-in Reader	IC/ID/RFID, Barcode ticket
Com Mode	RS485. Rear TCP/IP
Communication distance	1200m(RS485)
Data Transmission speed	4800bps/100m
Offline storage Capacity	10000pcs (Extensible)
Working Temperature	-30°C--70°C
Working Conditional	Indoor / Outdoor

Technical Parameters

1. Model No: ZT-ZS01 / ZT-ZP01
2. Dimension: 1300*340*440mm.
3. Housing Material: Steel & Tempered glass.
4. Housing Color: Blue / Yellow / Grey.
5. Support Built-in Reader: Mifare. EM. Barcode. Bluetooth.
6. Communication: RS485.
7. Communication distance: 1200m (RS485).
8. Data transmission speed: 4800bps/100m.
9. Offline Storage Capacity: 10000pcs (Extensible).
10. Blacklist Capacity: 10000pcs (Extensible).
11. Card Capacity: 10000pcs (Extensible).
12. Working Temperature: -30°C--75°C.
13. Working Condition: Outdoor. Indoor.
14. Database supports: SQL2000 / SQL2005 / SQL2008. Output report support IE. EXCEL. WORLD.
15. Controlled way: ID / IC cards or Ticket.
16. Special function: fully off-line system.



Technical Parameters

1. Main Control Board

1. Available to connect 3 IC/ID card reader, compatible for IC and ID to one main board
2. Available to control 1 set auto barriers
3. Working voltage: DC12V
4. Working temperature: $-25^{\circ}\text{C} \sim 60^{\circ}\text{C}$
5. Communication interface: RS485
6. The longest distance of communication: 1200m
7. The capacity of storage record: 100,000pcs



8. Card Capacity: 30000pcs
9. Blacklist Capacity: 10000pcs
10. Outline dimension: 260mm x 175mm

2. LED English display

1. Outline dimension: 380mm x 100mm.
2. RS485 communication, controlled software directly.
3. The hardware and equipment are not be controlled by computer directly.
4. Voice module is available.
5. Working voltage: DC12V.
6. Working temperature: $-25^{\circ}\text{C} \sim 60^{\circ}\text{C}$.
7. Relative humidity: $\leq 95\%$.
8. Light LED can display 4~5words.



3. Vehicle detector

1. Size: 27mm×21mm×37mm.
2. Alternating voltage: 7-12VDC.
3. Direct voltage: 12V.
4. Power consumption: <3W.
7. Operating frequency: 29KHz—90KHz.
9. Response time: 100mS.
10. Signal retention time: unconstrained.
11. Relay: 250V AC/3A.
12. System control: make up the influence from climate and the maximum temperature could be $50^{\circ}\text{C}/\text{H}$.
13. Coil inductance: the length of coil and connecting line is 80uH—300uH, and it's best length is between 150uH.
14. Coil connecting line: the maximum length is 5meters, connecting line should be stranded at least 20times.
15. The time of the handler turn back: 2S.



4. IC Card Reader

1. Size: 137mm x 84mm
2. Introduction

This IC card reader is plug in on the main control board and the card issuing device for IC card

3. reading and writing.
4. Working voltage: DC5V
5. Card reading distance: 3-15CM



5. Ticket / Card dispenser

1. Printing Method: Thermo sensitive printing
2. Speed: Max 250 mm/s
3. Width: Max 82.5mm/58.5mm
4. All Dots of Printing: Max 640/Max448
5. Printing Width: Max 80mm/Max58mm
6. Dot Density: 203resolution ratio (8dots/mm)
7. Word Stock: ChineseGB18030 24*24ASCII 12*24
8. Port Types: standard: serial port, parallel port, USB, electronic switch
9. Paper Knife:Auto cutting or half cutting (one million time)
10. Lifetime: 150KM
11. Stock Form Diameter: reliability<=8inch(200mm)
12. Power Supply: DC 24V/2.5A
13. Working Temperature: -20 to 60℃
14. Stored Temperature: -30 to 70℃
15. Depth of Paper: 0.057 to 0.155mm
16. Relative Humidity: 10-80%
17. Barcode Types: UPC-A / UPC-E / JAN13(EAN13)/CODE39/ITF/CODABAR/CODE93/CODE128
18. Drive:WIN2K,WINXP
19. Print Command: Compatible of ESC/POS



6. Card Issue Device

1. Size: 140×100×25(mm)
2. Introduction: IC card section and run without computer, and nested with different charge model,can be set freely.

3. Working voltage: DC12V
 4. Communication interface: RS485
 5. Communication baud rate: 4800b/s
 6. The longest communication distance: 1200m
 7. Recordings capacity when off-line: 10000pcs
 8. Backlist capacity: 10000pcs
 9. Card types: IC/ID optional
- Card reading distance: 3-15cm (IC card)



7.Barcode Reader machine

1. Dimensions (L*W*H): 11cm x 7cm x 16 cm
2. Weight: 12 g
3. Input Voltage: 5VDC \pm 0.2V
4. Operating Power: 2.3 W (450mA, 5V)
5. Host System Interfaces: USB, RS232 and Keyboard Wedge
6. Auxiliary Ports: RJ-45
7. Drop: Designed to withstand 1.5 m (5') drops
8. Environmental Sealing: IP53
9. Scan Pattern: Area Image (838 *640 pixel array)
10. Motion Tolerance: >270 cm/s (106 in/s) at focal point
11. Scan Angle: Horizontal: 42.4°, Vertical: 33°
12. Print Contrast: 20% minimum reflectance difference
13. Working Temperature: -10 to 60°C



8.Video Capture Card

1. Video capture card works with image management software, to check whether the information of entering car is same as exiting car or not, it ensures one ticket for one car, this is anti-theft function.
2. Standard PAL.NTSC Video input
3. 4ch real-time input. PCI-E Interface
4. Resolutions: 960*576(PAL) 25FPS .960*480(NTSC)30FPS
5. Support WIN2000 / WIN2003 / WINXP / WINXPE / WIN7 32 64 / Ubuntu12.04 Above



Features of management software

1. Adapting computer controlling and data processing technology with high automation, exact control.
2. The software table is simple and easy to operate with reliable and durable performance.
3. Adapting the combination of network and charging software to avoid illegal changing data and reading information beyond authority.
4. Management computer and each charging computer can be real-time communicated, and the management computer has external port with powerful extension.
5. Flexible management of authority. The authority of operators can be carefully distributed by management operator, for different operator, which can make sure each operator only can work with his duty authority that can guarantee the safety of the system.
6. The management operator can monitor the whole system by any computer.
7. We adapt the advanced C/S structure in this system, which can be applied in one enter one exit
8. Small parking lot system, also can be used in large-scale for multi-enter / multi-exit parking lot.
9. Management.it has powerful managing data functions with network itself and also can provide.
10. Humanized user table, installation,debugging,maintenance.
11. Powerful function of inquiring recordings/reports.
12. The parking lot system adapted the reporting
13. System which developed by ourselves, clients can print the data within any range or with anyone, or any specifications. And the report form adapts the standard hyper text, which can be easily converted and stored(IE、Word、Excel).

Intelligent parking management system

Card Management

Switch card issuing Register Search Card Information Output 1D Card Information Report 1D Card Batch Register 1D Card Batch Query

Card number: number: Car No.: Year: Authorized channel: Query

Card number	Car No.	number	Card type	Card status	Charging cycle	Card issuing	Card Date	Effective Date	Due date	In-Out State	Last Exit Date	User	Parking Space	Amount in car	Vehicle type	Charging rule	Driver License	Address	Te
005385C83F	182		VP card	Card Overdue		ICard	2022-12-29 15:17:27.45	2022-12-15	2023-01-15	Outside		User			\$0.00	0-Small Car	Free		
C802000863A			Temporary	Available		ICard	2022-12-29 15:15:39	2022-12-29 15:15:39	2070-01-01	Inside	2022-12-29 15:15:39	User			\$0.00	0-Small Car	Time Charge		
3502000863AD			Temporary	Available		ICard	2022-12-29 15:10:32	2022-12-29 15:10:32	2070-01-01	Inside	2022-12-29 15:10:32	User			\$0.00	0-Small Car	Time Charge		
D502000863A			Temporary	Available		ICard	2022-12-29 15:10:00	2022-12-29 15:10:00	2070-01-01	Inside	2022-12-29 15:10:00	User			\$0.00	0-Small Car	Time Charge		
D102000863A			Temporary	Available		ICard	2022-12-29 15:09:25	2022-12-29 15:09:25	2070-01-01	Inside	2022-12-29 15:09:25	User			\$0.00	0-Small Car	Time Charge		
4102000863AD			Temporary	Available		ICard	2022-12-29 15:09:09	2022-12-29 15:09:09	2070-01-01	Inside	2022-12-29 15:09:09	User			\$0.00	0-Small Car	Time Charge		
A002000863A			Temporary	Available		ICard	2022-12-29 15:08:28	2022-12-29 15:08:28	2070-01-01	Inside	2022-12-29 15:08:28	User			\$0.00	0-Small Car	Time Charge		
4E02000863A			Temporary	Available		ICard	2022-12-29 15:07:27	2022-12-29 15:07:27	2070-01-01	Inside	2022-12-29 15:07:27	User			\$0.00	0-Small Car	Time Charge		
9302000863AD			Temporary	Available		ICard	2022-12-29 15:05:57	2022-12-29 15:05:57	2070-01-01	Inside	2022-12-29 15:05:57	User			\$0.00	0-Small Car	Time Charge		
C6010008			Temporary	Available		ICard	2022-12-13	2022-12-13	2070-01-01	Inside	2022-12-13	User			\$0.00	0-Small Car	Time Charge		
DD010008639			Temporary	Available		ICard	2022-12-13 14:46:58	2022-12-13 14:46:58	2070-01-01	Inside	2022-12-13 14:46:58	User			\$0.00	0-Small Car	Time Charge		
00CD6ABB2B	1457		Month card	Card Overdue	month	ICard	2022-12-15 17:29:10	2022-12-15	2023-01-15	Outside		User			\$0.00	0-Small Car	Cycle Charge		

Total 12 Rows

Copy Card Info

Recharge Card

New IC Card

New ID Card

New Composite Card

Edit Card

Delete Card

Lost Card

Remove Loss

Download All Id Card

Download Residual ID Card

Blacklist enabled

Display/Hide Columns

Card Management

Exit

Batch card issuingRegister SearchCard Information OutputID Card Information InputID Card Batch RegisterID Card Batch Delay

Card numbernumberCar NoUserAuthorized channelQuery

Card List

Card number	Car No.	number	Card type	Card status	Charging cycle	Card issuing	Card Date	Effective Date	Due date	In-Out State	Last Exit Date	User	Parking Space	Amount in car	Vehicle type	Charging rule	Driver License	Address	Tel
805385C83F	102		VIP card	Card Overdue		IDcard	2022-12-15 17:27:45	2022-12-15	2023-01-15	Outside		User							
C802000863A			Temporary	Available		IDcard	2022-12-29 15:15:39	2022-12-29 15:15:39	2070-01-01	Inside	2022-12-29 15:15:39	User		\$0.00	0-Small Car	Time Charge			
9502000863AD			Temporary	Available		IDcard	2022-12-29 15:10:32	2022-12-29 15:10:32	2070-01-01	Inside	2022-12-29 15:10:32	User		\$0.00	0-Small Car	Time Charge			
D562000863A			Temporary	Available		IDcard	2022-12-29 15:10:00	2022-12-29 15:10:00	2070-01-01	Inside	2022-12-29 15:10:00	User		\$0.00	0-Small Car	Time Charge			
D182000863A			Temporary	Available		IDcard	2022-12-29 15:09:25	2022-12-29 15:09:25	2070-01-01	Inside	2022-12-29 15:09:25	User		\$0.00	0-Small Car	Time Charge			
4102000863AD			Temporary	Available		IDcard	2022-12-29 15:09:09	2022-12-29 15:09:09	2070-01-01	Inside	2022-12-29 15:09:09	User		\$0.00	0-Small Car	Time Charge			
A002000863A			Temporary	Available		IDcard	2022-12-29 15:08:28	2022-12-29 15:08:28	2070-01-01	Inside	2022-12-29 15:08:28	User		\$0.00	0-Small Car	Time Charge			
8E02000863A			Temporary	Available		IDcard	2022-12-29 15:07:27	2022-12-29 15:07:27	2070-01-01	Inside	2022-12-29 15:07:27	User		\$0.00	0-Small Car	Time Charge			
9302000863AD			Temporary	Available		IDcard	2022-12-29 15:05:57	2022-12-29 15:05:57	2070-01-01	Inside	2022-12-29 15:05:57	User		\$0.00	0-Small Car	Time Charge			
C6010008			Temporary	Available		IDcard	2022-12-13	2022-12-13	2070-01-01	Inside	2022-12-13	User		\$0.00	0-Small Car	Time Charge			
DD010008639			Temporary	Available		IDcard	2022-12-13 14:46:58	2022-12-13						\$0.00	0-Small Car	Time Charge			
W00G6AB82B	1457		Month card	Card Overdue	month	IDcard	2022-12-15 17:29:10	2022-12-15						\$0.00	0-Small Car	Cycle Charge			

Are you sure you want to delete it?

YesNo