i PARKING



A

Parking Control System

i PARKING Parking Control System is the most economical construction cost and the most convenient and smart way of operation, providing parking managers with increased sales and cost savings, provides smart parking service to drivers, as well as an economical parking environment through various parking discount promotions.

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Auto Pay Station

IP-PS2000 (18.5)



Funcion

- A driver is able to pay the parking fee through the exit auto pay machine located at the exit gate, or make advance payment at the auto pay station located at the parking lot and exit without stopping at the exit gate
- Members who have registered a payment method in the i PARKING App can automatically pay when leaving the car (Parking Pass)
- Non-members who are not registered in i PARKING App can pay with card, postpaid transportation card, PAYCO, mobile NFC payment, etc.
- Discount and payment through mobile and web after querying plate number
- View your vehicle information with LCD touch screen simply and easily

Product Specifications

[Product specifications]

- Display: 18.5 inch LCD display
- Touch method: Pressure sensitive touch screen (waterproof)
- Printing device : 2"Thermal printer
- Payment method: Transportation card, barcode, credit card (IC card)
- Network: LAN (TCP/IP) 10M/100 Mpbs
- PC specification : Windows based
- Rated voltage : AC 220V ± 10%, 50/60Hz
- Environment : Temperature –20°C ~ + 60°C
- (Based on using temperature compensation fan/Heater)

[Size]

- Exit Auto Paystation (Exit): 500(W) x 291(D) x 1416(H)mm
- Exit Auto Paystation (Pre): 500(W) x 291(D) x 2000(H)mm

[Others]

- Painting: Desired colors for outdoor painting

Exit Auto Pay Station (Card only)

IP-PS2000 (18.5)



Auto Pay Station (Card only)

IP-PS2000 (32)



IP-PS1350

Cash & Card **Auto Pay Station**

Functions

- A driver is able to pay the parking fee through the exit auto pay machine located at the exit gate, or make advance payment at the auto pay station located at the parking lot and exit without stopping at the exit gate
- Members who have registered a payment method in the i PARKING App can automatically pay when they leave (Parking Pass)
- Non-members who are not registered in i PARKING App pay with card, postpaid transportation card, PAYCO, etc.
- Discount and payment through mobile and web after querying plate number
- View your vehicle information with LCD touch screen simply and easily

Product Specifications

- Display: 18.5 inch LCD display
- Voltage : AC 220V \pm 10%, 50Hz \sim 60Hz
- Operating Temperature : -20°C ~ +60°C
- (Based on temperature compensation fan/Heater)
- Enclosure: Standalone waterproof type, SPC Steel 1.6t, painting after galvanizing after galvanizing
- Power failure compensation: up to 30 minutes (UPS option)
- Currency: 3 bills (1,000 won, 5,000 won, 10,000 won) 3 coins (50 won, 100 won, 500 won)
- Cash Storage Capacity: up to 500 sheets
- Currency type: 5,000 won (maximum 1,000)/1,000 won (max 1,000) 500 won (up to 450)/100 won (up to 550)
- Collected Parking Tiecket Storage: 1,000 sheets or more
- Thermal Print Receipt
- Communication: RS-232, LAN (TCP/IP)

[Size]

- Exit Auto Paystation (Cash&Card): 730(W) x 556(D) x 1600(H)mm
- Prepayment Auto Pay Station (Cash&Card): 730(W) x 556(D) x 1800(H)mm

[Others]

- Painting: Desired colors for outdoor painting

Exit Auto Pay Station (Cash&Card)



Prepayment Auto Pay Station (Cash&Card)

IP-PS1370



IP-PS1350

Smart License Plate Recognition

IP-LPR1000

Functions

- Recognize the plate number by analyzing the image transmitted by the number recognition camera
- Trasnmit the recognized plate number image to the plate number managing computer which linked via LAN cable connection
- When the detection signal is received from the vehicle detection sensor, it receives the video signal from the number recognition camera and recognizes it and processes it
- Receives a signal from the vehicle detection sensor and transmits a signal to operate the infrared lighting device to shoot a vehicle of constant illumination
- Recognized plate numbers are stored in the local server's database and stored in the cloud server simultaneously, so you can check them on the web and mobile apps anytime and anywhere

Product Specifications

[Camera]

- Synchronous method: Internal/external synchronous method

Shutter Speed: 0.02ms ~ 2,000msLighting device: IR-LED lighting

- Light Angle: 20° (Adjust angle according to site conditions)

- Resolution : 1600 Pixels (Horizontal), 1200 Pixels (Vertical)

- Image Sensor : CMOS image sensor

- Communication: LAN (TCP/IP) 10/100Mbps

- Main power supply: AC 220V, 60Hz

- Operating temperature : -30°C to +50°C

- Lens: 4-18mm Vari-focal Lens

- Manual Iris

[Minimum PC specification for LPR (Separate Installation)]

- CPU: Intel i5-4460 3.2GHz - Memory: DDR3 DIMM 8GB

- HDD: 256GB 2.5" SSD, 500GB 2.5"(SATA)

Power: 300W mini ATXO/S: Windows 7 Pro

[Size]

- Integrated LPR : $387(W) \times 180(D) \times 360(H)$ mm - Standalone LPR : $370(W) \times 348(D) \times 234(H)$ mm

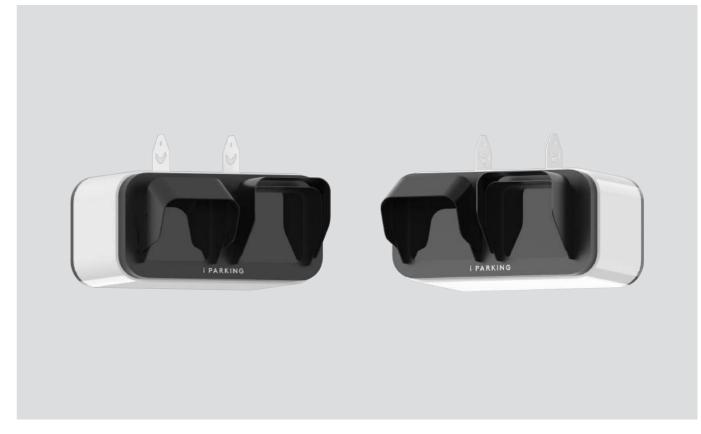
[Others]

- Painting: Desired colors for outdoor painting

Integrated LPR IP-LPR1000



Standalone LPR IP-LPR1030



Smart License Plate Recognition Stand Type

IP-LPR2001



Functions

- Recognize the plate number by analyzing the image transmitted by the number recognition camera
- Trasnmit the recognized plate number image to the plate number managing computer which linked via LAN cable connection
- When the detection signal is received from the vehicle detection sensor, it receives the video signal from the number recognition camera and recognizes it
- Receives a signal from the vehicle detection sensor and transmits a signal to operate the infrared lighting device to shoot a vehicle of constant illumination
- Recognized plate numbers are stored in the local server's database and stored in the cloud server simultaneously, so you can check them on the web and mobile apps anytime and anywhere

Product Specifications

[Product specifications]

Camera: 2M CMOS (Global shutter)Lens: Vari — focal Lens (Manual)

Lighting device : IR LED lightResolution : 1600 x 1200 Pixels

- Network : LAN (TCP/IP) 10M/100Mbps - Rated voltage : AC 220V \pm 10%, 50/60Hz

- Light Angle: 10°

[Size]

- Standalone type LPR (One Side) : 200(W) x 267(D) x 1187(H)mm
- Standalone type LPR (Both Sides): 200(W) x 267(D) x 1415(H)mm

[Others]

- The rear door and top cover can be opened and closed
- Painting: Desired colors for outdoor painting

Standalone LPR (One Side)



Standalone LPR (Both Sides)

IP-LPR2000

IP-LPR2001



Smart Car Gate

IP-CG2100



Functions

- Open automatically by connected LPR and close automatically by loop coil
- 1 cycle operation is consisted with slow start, equal speed area, and slow stop while minimizing the vibration of the bar through strong brake inside
- There is a manual open/close handle for opening or closing in case of blackout, and it can be connected up to 3 detectors

Product Specifications

[Barrier Gate]

- Drive method: Crank type indirect drive method
- Control method : BLDC motor drive control
- Bar Length: Aluminum 3m (straight and bent) up to 4m
- Operation speed: Bar up/down 1.5 ~ 3 seconds (1.5 seconds: 3m)

[Camera]

Camera: 2M CMOS (Global shutter)
Shooting method: Trigger method
Lighting device: IR LED light
Resolution: 1600 x 1200 Pixels

- Network: LAN (TCP/IP) 10M/100Mbps

[LED Display]

- LED Display Board: 48 x 48mm LED Module (2rows 6rows)

- Communication: RS-232/LAN (TCP/IP)

[Size]

- LPR barrier gate: 352(W) x 403.5(D) x 1127(H)mm
- Standalone barrier gate: 352(W) x 403.5(D) x 1127(H)mm
- Barrier gate with integrated LPR and Display: 352(W) x 403(D) x 1373.8(H)mm

[Others]

- The front door and top cover can be opened and closed
- Painting: Desired colors for outdoor painting
- Rated voltage : AC 220V \pm 10%, 50/60 Hz
- Environment : 0° C ~ 50° C (Storage -20 $^{\circ}$ C ~ 70° C)
- Humidity: + 10% ~ + 80% (No condensation)

Related Model Name

Product names	Specifications	Model name
LPR, LED Display integrated barrier gate (front)	LED Display barrier gate, LPR (front)	IP-CG2101
LPR integrated barrier gate (front/rear)	Barrier gate LPR (front rear)	IP-CG2102
LPR integrated barrier gate (front)	Barrier gate LPR (front)	IP-CG2103
Standalone barrier gate	Barrier gate	IP-CG2104

Barrier Gate with integrated LPR and Display

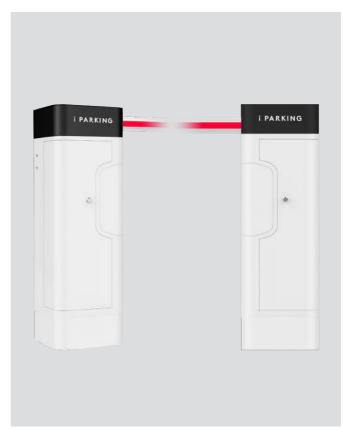




Standalone Barrier Gate

IP-CG2104 LPR Barrier Gate

IP-CG2102





LED Display Board

IP-DB1000

Functions

- If the plate number is recognized when vehicle is entering the parking lot,
 a guide message for the entering vehicle is displayed
- Send text message of various events and notification
- Displays entering plate number through connected local server
- Connected with Cloud Server and check the identity of a parking member and display information and notification
- Display parking fee when leaving

Product Specifications

– Rated power supply : AC 220V \pm 10%, 50/60Hz, DC5V

- Module array: 2 rows 6 rows, total size 96 x 288mm

- Display Color : Red, Green, Blue

- Controller: Micro controller (for text/graphics)

- Display method: RS-232C (optional RS-485)

– Operating Temperature : –20°C ~ +50°C

[Size]

- Display board : 350(W) x 210(D) x 245(H)mm

- Display board Standalone type: 350(W) x 210(D) x 1319.4(H)mm

[Others]

- Painting: Desired colors for outdoor painting

LED Display Board IP-DB1000



Standalone LED Display Board

IP-DB1050



Smart Digital Signage

IP-DS2000

Functions

- Provide customized information such as ad and various information related with parking to targeted people or to publics
- Deliver the real-time information and provide prompt and accurate information and notification by network
- Centralized management of the entire displays make it easy and convenient to manage and distribute content and allows cost reduction and labors

Product Specifications

[Display specifications]

Display: 32 inch LCD Display
Brightness: 1500cdm² or more
Operating system: Android
Resolution: 1920 x 1080 Pixels

- Network: LAN (TCP/IP) 10M/100 Mpbs

[Android board specifications]

- Main Chipset: ARM Coretex A9 1.8Hz Quad Core

System Memory: DDR3 1G RAMInternal storage: 8GB FlashExternal storage: USB Memory

- O/S: Android 4.4 Kitkat

- AV connection (Video): Digital (HDMI V1.3), Analog (Component, Composite)

- AV connection (Audio) : Digital (Coaxial), Analog (RCA Stereo)

- Network: 10/100Mbps RJ45 LAN Port

[Size]

 $-500(W) \times 243.3(D) \times 1800(H)$ mm

[Others]

- Painting: Desired colors for outdoor painting

Digital Signage (Advertisement)





Digital Signage (Inducement)

IP-DS2000



Smart Street LPR

IP-LPR2001



Functions

- Possible to recognize plate number both front and rear, and allows efficient use of space
- Enables zoom and focus instantly through built-in auto focus control module for autofocus of motorized zoom lens
- Acquisition and analysis of image (image) when signal is detected from vehicle sensor
- Improves recognition rate by analyzing videos of vehicles entering the recognizable area
- Analyze images and transfer recognized information and images by embedded PC

Product Specifications

Camera: 2M CMOS (Global shutter)
Lens: Vari — focal Lens (Manual)
Lighting device: IR LED light
Resolution: 1600 x 1200 Pixels

Network : LAN (TCP/IP) 10M/100MbpsRated voltage : AC 220V ± 10%, 50/60Hz

- Light Angle: 10°

[Size]

- Cross section : $200(W) \times 267(D) \times 1187(H)$ mm - Both sides : $200(W) \times 267(D) \times 1415(H)$ mm

[Others]

- The rear door and top cover can be opened and closed
- Painting: Desired colors for outdoor painting

Street LPR (One Side)

IP-LPR2001 Stree

Street LPR (Both Sides)

IP-LPR2000





Detailed models are subject to change

Street LPR Example

Example of system configuration



Local Server

IP-LS1000

Functions

- Parking management server is equipped with communication port and program for integrated management of each local equipment, and a centralized management system is established by using LAN network with parking control computers installed in distributed parking lots which allows general management
- In case of parking lot is located too far, parking management server can communicate through VPN or TCP/IP for long distance
- Built with LAN (TCP/IP PROTOCOL) for upper lever server
- Card reader, receipt printer, and the safe are connected and it can be used as a toll calculator

Product Specifications

- CPU: Core i5-6400, 7400 (6th and 7th generation)

- M/B: H81 Chipset, Socket 1151, Mini ITX (LAN x 2, COM x 6, USB x 8)

- RAM: DIMM DDR4 8G - SSD: SSD 256G MLC

- HDD: 500G 2.5"

- Power: 300W (2Ball-Bearing Fan)

- Case: Black 290(W) x 220(D) x 72(H)mm

- FAN: 60mm Fan (2ball-Bearing)

- O/S: Windows 7 pro Korean 64bit

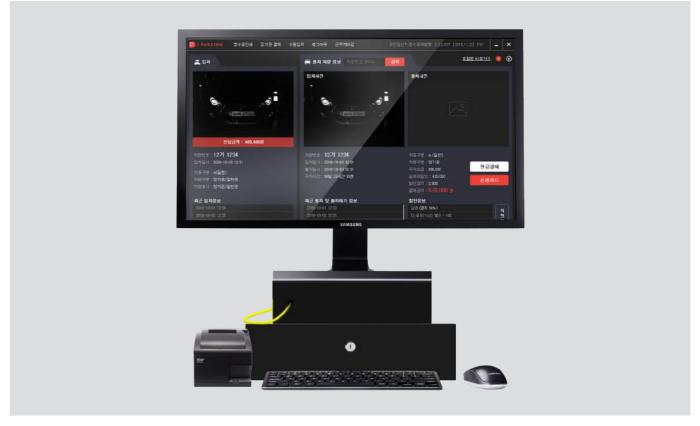
Related Model Name

Product name	Specifications	Model name	Procured item number
Local server	Unmanned local server	IP-LS1000	22983860
Local server	Manned local server	IP-LS1050	22983861

IP-LS1000 **Unmanned Local Server**



Manned Local Server IP-LS1050



Detailed models are subject to change

Central Management Computer

IP-CMC1000

Functions

- Local server installed in the various parking lot connect with LAN updates to Cloud Server in real time in order to manage the sales and usage status always on web and mobile
- If abnormal entry/exit occurs due to the malfunction of devices connected to the barrier gate or due to the entry of special vehicle, the barrier gate can be opened or closed remotely through web and mobile app without the administrator attending on site
- Can be output as report data
- Receipt printer and the safe are connected and it can be used as a toll calculator

Product Specifications

- CPU: Core i5-6400 Processor (2.7GHz, 1MB)

- Operating system : Windows 7 professional

- Memory: 2 DiMMs (Total 2 Slots) for DDR3L, 4GB DDR3L Memory at 1600MHz (4GB x 1)

- Hard Drive: 500GB (7200rpm S-ATA3)

- Graphic : Intel® HD Graphics 520 (D-Sub, DVI-D)

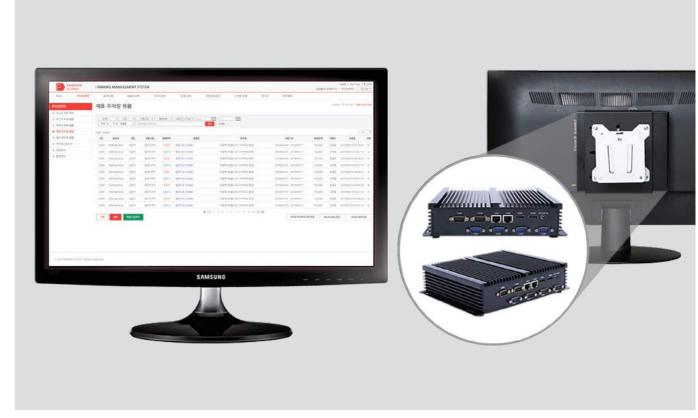
- Network : Gigabit LAN

- Power: 350W

- Size: 173(W) x 406(D) x 356(H)mm

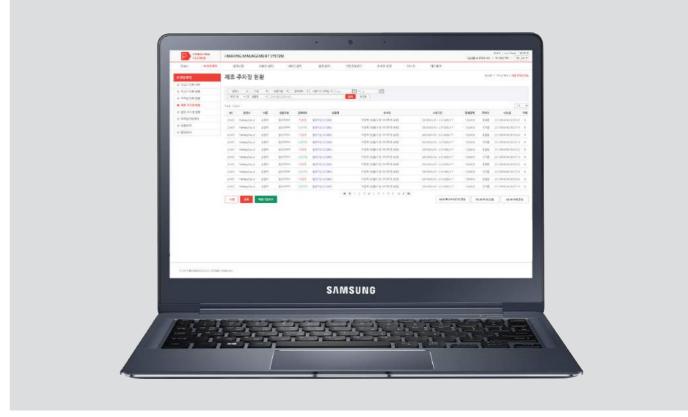
- Weight: 8.8kg

IP-CMC1005 Mini PC Type



Detailed models are subject to change

Laptop Type IP-CMC1050



Detailed models are subject to change

VolP Phone

IP-VP2000



Functions

- Calls can be made with internet phone to the public network by using the existing network for data communication
- Installed at the entrance/exit of the parking lot to call the manager in case of emergency

Product Specifications

[Standalone type VoIP]

Power supply: DC 12V, 200mA
Operating Temperature: 0°C ~ 40°C
Wiring method: Individual 2 wire type
Communication distance: 300m (0.65Φ)

[Intercom]

- Power: DC 24V, 2.5A

Operating Temperature : 0 ~ 50°CSize : 140(W) x 45(D) x 120(H)mm

- Protocol : SIP

- Network: LAN 10/100 Base-T with Auto MDIX

[Phone]

- Power: DC 5V, 2A

- Operating temperature : $0 \sim 45$ °C - Size : 166(W) x 220(H) x 39(L)mm

- Protocol : SIP

- Network: 10/100/1000 BASE T, 2 ports auto MDI/MDIX

Standalone type VoIP IP-VP2000



Intercom IP-VOIP1000 Phone IP-VP335









Lobby Intercom

IP-LP1000

Functions

- Enclosure for mounting intercom to communicate with security room and other rooms
- Intercome model can be vary by project requirement

Product Specifications

- Size: 320(W) x 250(D) x 1100(H)mm

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Interphone

IP-IP1000

Functions

 Installed at the entrance/exit so the driver talks directly to the security guard or manager

Product Specifications

Power supply: DC 12V, 200mA
Operating Temperature: 0° ~ 40° C
Wiring method: Individual 2 wire type
Communication distance: 300m (0.65Φ)

- Size : $183(W) \times 41(D) \times 169(H)$ mm

CCTV Camera

IP-CTC1000



Functions

- Provide visual information by filming the plate number and the exterior of the vehicle when it is entering in the parking lot
- Provide information in case of an accident by checking the vehicle number and the exterior of the vehicle
- Built-in IR illumination for night vision
- Convenience features such as lens correction for efficient monitoring
- Waterproof and dustproof for outdoor use

Product Specifications

- Image Sensor: 1/2.9 type 2.19M CMOS

- Total pixel/effective pixel: 2,000(H) x 1,121(V)/1,984(H) x 1,105(V)

- Minimum Illumination: Color: 0.15Lux (1/30sec, F1.8), 0.003Lux (2sec, F1.8)

B/W: OLux (IR LED on)

- Focal Length: 3.6mm Fixed Focus Lens

- Aperture Ratio: F1.8

- View angle: H: 86.5°/V: 47.8°/D:101.2°

- Lens Type : Fixed/Board in type

- Network : RJ-45 (10/100BASE-T)

- Protocol : TCP/IP

- Waterproof Level : IP66

- Power: PoE (IEEE802.3af, Class2)

- Power consumption: 5.7W (Max.)

- Camera POLE (with lighting): Pole diameter - 101.6 Φ

Pole height – 2.300mm (on site adjustable)

Pole material SUS, powder coating

Pole type anchor fixed type

[Size]

- CCTV 2.3M (One Side + P plate) : 521(W) x 200(D) x 2300(H)mm

- CCTV 2.3M (Both Sides): 362(W) x 200(D) x 2300(H)mm

[Others]

- Painting: Desired colors for outdoor painting

CCTV 2.3M (One Side + P plate)





CCTV 2.3M (Both Sides)

IP-CTC1005



Network Camera

IP-ECC1050

Functions

- Network camera installed at the entrance/exit of the parking lot to capture the whole exterior of the vehicle
- Illumination on the top of the pole which allows to take photos at night

Product Specifications

- Image Sensor: 1/2.9 type 2.19M CMOS

- Total pixel/Effective pixel: 2,000(H) x 1,121(V)/1,984(H) x 1,105(V)

- Minimum Illumination: Color: 0.15Lux (1/30sec, F1.8), 0.003Lux (2sec, F1.8)

B/W: OLux (IR LED on)

- Focal Length: 3.6mm Fixed Focus Lens

- Aperture Ratio: F1.8

- View angle: H: 86.5°/V: 47.8°/D:101.2°

- Lens Type: Fixed/Board-in type

- Network : RJ-45 (10/100BASE-T)

- Protocol : TCP/IP

- Waterproof Level : IP66

- Power: PoE (IEEE802.3af, Class2)

- Power consumption: 5.7W (Max.)

- Camera POLE (with lighting): Pole diameter - 101.60

Pole height – 1.200mm (on site adjustable)

Pole material SUS, powder coating

Pole type anchor fixed type

[Size]

- Network Camera 1.2M (Single sided) : 448(W) x 200(D) x 1200(H)mm

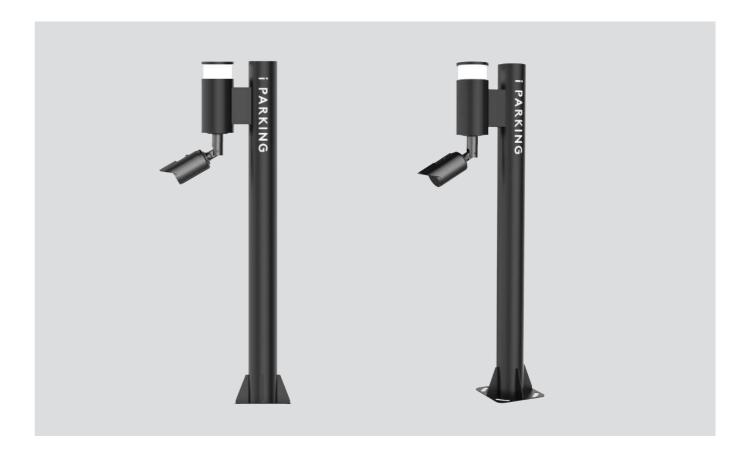
- Vision camera 1.2M (Both sides): 792(W) x 200(D) x 1200(H)mm

[Others]

- Painting: Desired colors for outdoor painting

Network Camera 1.2M (Single sided)

IP-ECC1000



Vision Camera 1.2M (Both Sides)

IP-ECC1050





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VPN
IP-VPN1000

Functions

- Public Internet can be used as a private network
- Prevent attacks from inside and outside, block unauthorized access, and support regulatory compliance
- UTM security(virus/spam protection, web filtering, IPS) blocks all forms of viruses and malware before it damages the network
- Registry antivirus engine based on Kaspersky Lab engine is provided annually

Product Specifications

- CPS: 5,000 - IPS function integration support

- OoS support - Max Policy: 1,000

- VPN Tunnels: 256

Power redundancy : Single

- Concurrent sessions: 64,000

- Static, RIP, OSPF, BGP support

- Multicast routing PIM-SM/DM/SSM, DVMRP, MSDP support
- NAT support for source address and destination address
- Active-Standby, Active-Active support
- Enhanced Security with IPSec VPN Tunneling and Firewall Function

Related Model Name

Product name	Specifications	Model name
VPN server	Server	IP-VPN1050
VPN client	Client	IP-VPN1000



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Vehicle Detector

IP-VD1000

Functions

- When a vehicle enters an entrance to a parking lot, the frequency is modulated by a loop coil embedded in the floor, and the signal is transmitted
- In order to prevent the malfunction due to the close frequency that occurs frequently in the detector, the frequency of the loop is informed by a beep sound when the power is turned on to prevent the malfunction due to interference between two or more loops when vehicles exist
- Convenience to check the number of parking count through the loop by beep sound without visiting the site where the detector is installed
- Easily check the short or disconnection of the product with a beep
- Direction determination mode that improves the important problem

Product Specifications

- Operation mode: 8 mode selection function
- Display: Red LED (Power), Green LED (Detection), Yellow LED (Timer)
- Frequency Conversion: High & Low 4 levels adjustable
- Power consumption: 2W at all times, 25W during operation
- Size: 135(W) x 97(D) x 41(H)mm
- Enclosure Material: ABS Material/Black
- Power supply: DC 12V, 500mA

Hybrid Pay Station
IP-BT1000

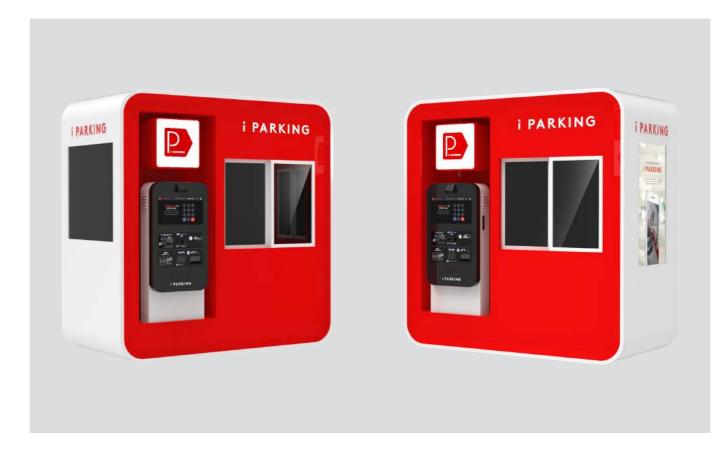
Functions

- It is installed at the entrance/exit of the parking lot, and enables manual or auto payment
- Manual with administrator or Auto payment without administrator
- 43 inch digital signage panel is attached to send various information and advertisements (optional)
- Color and logo can be exposed, and branding can be done by company
 (* i PARKING service name must be exposed)

Product Specifications

- Size: 2000(W) x 1200(D) x 2100(H)mm (variable to the site)
- Enclosure Material : Galva, Acrylic
- Facilities Included : Desk, Power Distribution Board, Air Conditioning Unit,
 Awning (Optional), Ventilator (Optional), Signage (Optional)

Hybrid Pay Station IP-BT1000



Hybrid Pay Station

Example of system configuration







Auto Pay Station Booth

IP-CPSBT1000



Functions

- Designed booth installed at the entrance and exit of the parking lot, allowing unmanned advance fee settlement
- It can be installed at the entrance/exit of the parking lot, and it can cover rain because of the protruded upper cover
- The light on top and lighting sign on side help users to make a pre-payment at night
- Color of the booth is selectable(*Note, i PARKING brand name must be exposed)

Product Specifications

- Size: 1000(W) x 1200(D) x 2250(H)mm (variable to the site)

Enclosure Material : Galva, AcrylicFacilities Included : Light, Signs

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Guard Booth

IP-CPSBT1100

Functions

- Guard Booth which is installed at entrance/exit of parking lot and where a staff (security guard) can reside
- Clear glass doors are located on the left/right/front to see the outside at a glance
- Mini booth with integrated chair and power line for convenient use
- Lighting at the top part for night watch
- Customizable, so clients can build their own parking booth
 (* i PARKING service name must be exposed)

Product Specifications

- Size: 1000(W) x 1200(D) x 2250(H)mm (variable to the site)

- Enclosure Material : Galva, Acrylic

- Facilities Included : Light, Electric Wire

Designed Canopy

IP-CNP1000



Functions

- Designed Canopy that covers the sun or prevents rain
- The awning is installed on the steel canopy frame, so the length of the lining can be adjusted by remote adjustment and switch, and shade space can be expanded or narrowed
- Lighting advertising on front and back enables visual advertising for drivers and pedestrians
- Optimized design for small spaces by minimizing pipe and awning size
- Height and size of awning can be changed and be customized by the request of client

(*Note, i PARKING brand name must be exposed)

Product Specifications

Input power: AC 220V/60HzCurrent consumption: 1.60APOWER: 350W during operation

Speed: (rpm) 12Diameter: 45mmLoad: (N.m) 65 torque

- Communication: Unidirectional RF, DRY CONTACT

- Enclosure Material: Steel Color Powder Coating (except awning)- Size: 1400(W) x 1000(D) x 3000(H)mm (variable to the site)

- Weight: Around 50kg (with awnings)

Designed Canopy IP-CNP1000



Designed Canopy

Example of system configuration



Monitoring Rack IP-SMR1000



Functions

- Installed in the control center, it is available to monitor the operation status of multiple parking lots, and administrator can easily check the status through the administrator's PC and smartphone
- Identify equipment status in local parking lots
- Monitor vehicle entry and exit status in local parking lot
- In the case of the site where the pre-payment machine is installed, customers' inquiries are checked and be responded at real time
- Color and logo can be exposed, and can be customized by the request of client (*Note, i PARKING brand name must be exposed)

Product Specifications

- Enclosure material : STEEL material, powder coating

- Size: 5605(W) x 600(D) x 2325(H)mm

- Monitor screen size: standard 43", optional 52", etc. available

- Resolution: 1920 x 1080 Pixels

Contrast Ratio : 3000: 1Response speed : 8mc

- Horizontal frequency : 30 ~ 81KHZ

- Max Pixel Frequency: 148.5MHz

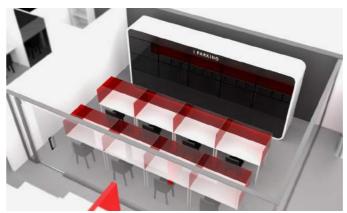
- Operating condition: Temperature 0°C ~ 40°C/Humidity 10% ~ 80%

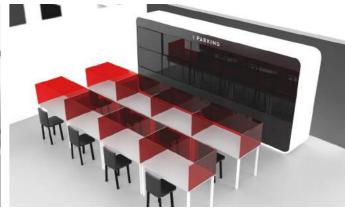
- Power supply : AC100 ~ 240V 50/60Hz

Smart Rack 43" 4*2 IP-SMR1000



Example Of View











The actual product may vary from the images shown above

Manual Switch for **Barrier Gate**

IP-SD1000

Functions

- It enables the barrier gate can be opened or closed manually

Product Specifications

- Mounting Structure: Mounted to the wall through table fixing or bracket

- Power: DC 12 V

- CH1 : UP

- CH2 : DOWN

- Size: 90(W) x 130(H) x 26(D)mm

i PARKING

B

Next Generation Parking Control System _i-BOT

i PARKING's Next Generation Parking Control System i-BOT presents futuristic smart parking services to customers, and provides a variety of parking services and advanced solutions equipped with big data based deep learning technology.



i-BOT I PR Signage

IP-LPR3000









Functions

- Next generation premium parking robot with LPR(front/rear) and signage
- Recognize vehicle number by analyzing image transmitted by LPR camera
- Transmission of recognized vehicle number image as connecting to LPR management
- When the detection signal is received from the vehicle detection sensor, it receives the image signal from the LPR camera and processes next step
- Receives a signal from the vehicle detection sensor and transmits a signal to operate the infrared lighting device to shoot a vehicle in steady illuminance
- Recognized vehicle numbers are stored in the local server's database and at the same time stored in the cloud server, so it is possible to check the numbers by web and mobile apps anytime and anywhere
- Provide customized parking information for advertisement and various parking to unspecified and targeted individuals
- Real time information can be delivered based on the network, and fast and accurate information and announcements can be delivered
- Centralized management of the whole display view makes it easy and convenient to manage and distribute, deduce labor and cost

Product Specifications

[Camera]

- Camera: 2M CMOS (Global shutter)

- Shooting method: Trigger method

- Lighting device : IR LED light

- Resolution: 1600 x 1200 Pixels

- Network: LAN (TCP/IP) 10M/100Mbps

- Rated voltage : AC 220V ± 10%, 50/60Hz

- Light Angle: 20°

[Android Board specifications]

- Main chipset: ARM Coretex A9 1.8Hz Quad Core

- System Memory: DDR3 1G RAM

- Internal storage: 8GB Flash

- External storage : USB Memory - O/S: Android 4.4 Kitkat

AV connection (video)

: Digital (HDMI V1.3)

Analog (Component, Composite)

- AV connection (Audio)

: Digital (Coaxial)

Analog (RCA Stereo)

- Network: 10/100Mbps RJ45 LAN Port

[Display Specifications]

- Display: 27 inch LCD display

- Operating system : Android

- Resolution: 1920 x 1080 Pixels

- Brightness: over 1000cd/m²

- Network: LAN (TCP/IP) 10M/100Mbps

- Rated voltage : AC 220V 10%, 50/60 Hz

[PC Specifications]

- CPU: Core i5-6400, 7400 (6th and 7th generation)

- M/B: H81 Chipset, Socket 1151, Mini ITX (LANx2, COMx6, USBx8)

- RAM: DIMM DDR4 8G - SSD: SSD 256G MLC

- HDD: 500G 2.5"

- Power: 300W (2Ball-Bearing Fan) - Case: Black 290(W) x 220(D) x 72(H)mm

- FAN: 60mm Fan (2ball-Bearing)

- O/S: Windows 7 pro Korean 64bit

[Size]

 $-553(W) \times 642(D) \times 1390(H)$ mm

[Others]

- Painting: Powder coating for outdoor colors and ABS coating

Related Model Name

Product name	Specifications	Model name
i-BOT LPR Signage	Signage, 2 forward LPRs, 1rear (Right) LPR	IP-LPR3001
i-BOT LPR Signage	Signage, 2 forward LPRs, 1rear (Left) LPR	IP-LPR3002
i-BOT LPR Signage	Signage, 2 forward LPRs	IP-LPR3003

IP-LPR3000 i-BOT LPR Signage



i-BOT LPR Signage

Example of system configuration



i-BOT Auto Pay Station

IP-PS3000







Functions

- Next generation premium robot payment machine that allows the driver to settle the fare directly while leaving the vehicle
- Members who have registered a payment method in the i PARKING App can automatically pay when leaving the car (Parking Pass)
- Non-members who are not registered in i PARKING App can pay with card, postpaid transportation card, PAYCO, mobile NFC payment, etc.
- Discount and payment through mobile and web after looking up the vehicle number
- Color LCD touch screen makes it easy and easy to find your vehicle information

Product Specifications

[Pay Station]

- Touch Panel: 10.1 Inch
- Printing device : 2 "Thermal printer
- Payment method: Transportation card, barcode, mobile NFC payment, credit card (ICcard)
- Network : LAN (TCP/IP) 10M/100Mbps
- System: Intel Quad core i3, 4G Ram, 128 SSD/Windows 10 lot
- Environment : -25°C ~ 40°C (Option : HEATER) - Humidity: +10% ~ 80% (No condensation)

[Size]

 $-495(W) \times 543(D) \times 1384(H)$ mm

[Others]

- Painting: Powder coating for outdoor colors and ABS coating

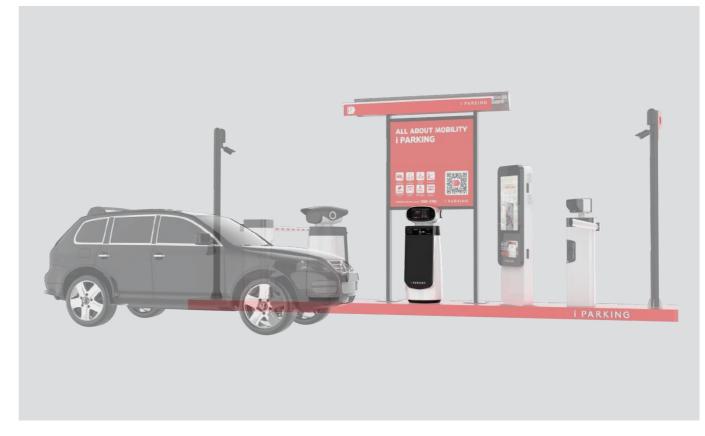
i-BOT Auto Pay Station



i-BOT Auto Pay Station

Example of system configuration

IP-PS3000



i-BOT Auto Pay Station (Advance)

IP-PS3001







Functions

- i-BOT is a next generation premium settlement robot that allows you to pay the fare in advance automatically before exit
- Members who have registered a payment method in the i PARKING App can automatically pay when exit (Parking Pass)
- Non-members who are not registered in i PARKING App can pay with credit card, transportation card, mobile NFC pay, etc.
- Discount and payment through mobile and web after checking the vehicle number
- Color LCD touch screen makes it easy to find the vehicle information

Product Specifications

[Pay Station]

- Touch Panel: 10.1 Inch

- Printing device : 2 "Thermal printer

- Payment method: Transportation card, barcode, mobile NFC payment, credit card (ICcard)

- Network : LAN (TCP/IP) 10M/100Mbps

- System: Intel Quad core i3, 4G Ram, 128 SSD/Windows 10 lot

- Environment : -25°C ~ 40°C (Option : HEATER) - Humidity: +10% ~ 80% (No condensation)

[Size]

 $-495(W) \times 543(D) \times 1384(H)$ mm

[Others]

- Painting: Powder coating for outdoor colors and ABS coating

i-BOT Advance Auto Pay Station





i-BOT Advance Auto Pay Station

Example of system configuration



C Signal Control System

i PARKING signal control system facilitates traffic in the parking lot and enables the driver to use the parking lot safely and conveniently.

01 Loop Coil | IP-LC1000

Q2 Vehicle Detector IP-VDS1000

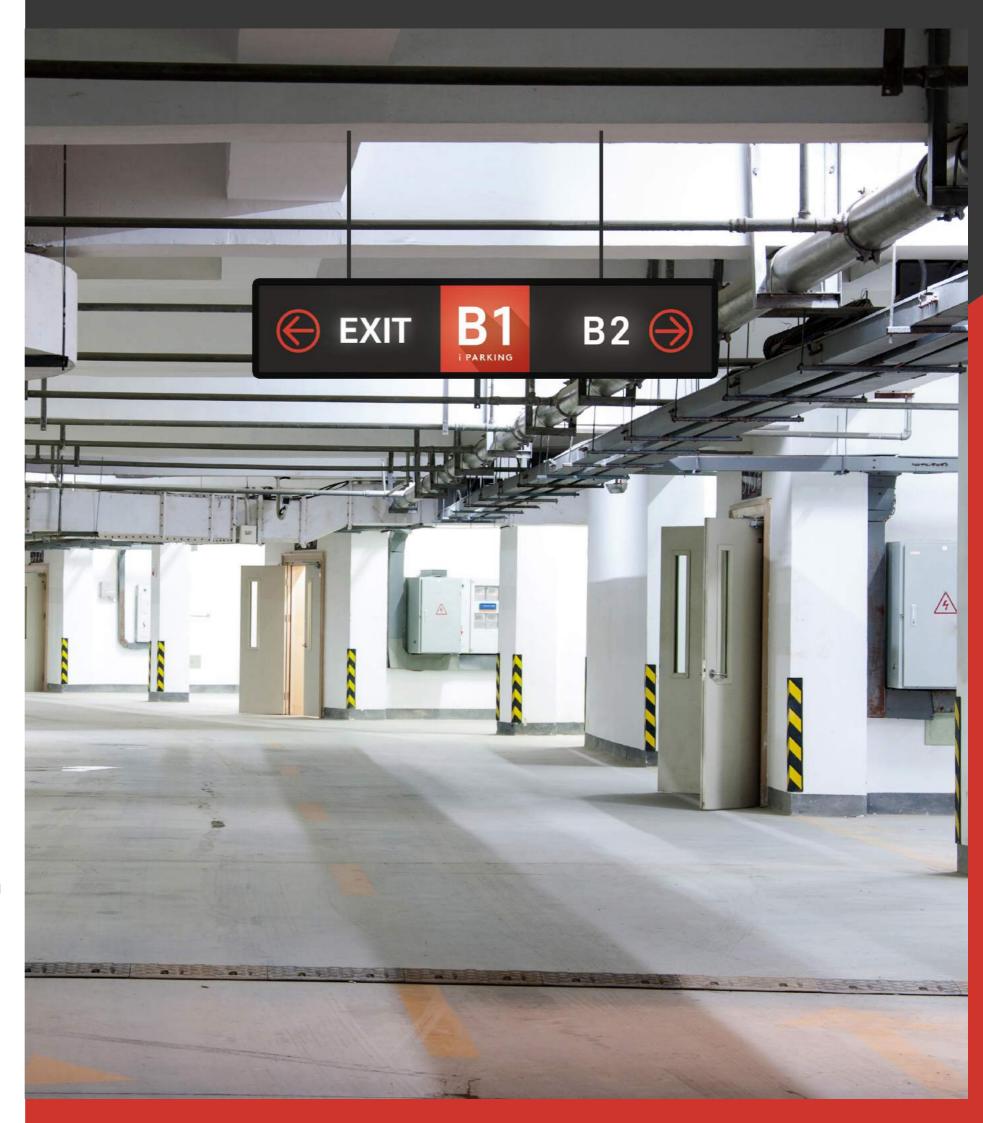
Vehicle Count Panel
IP-VCP1000

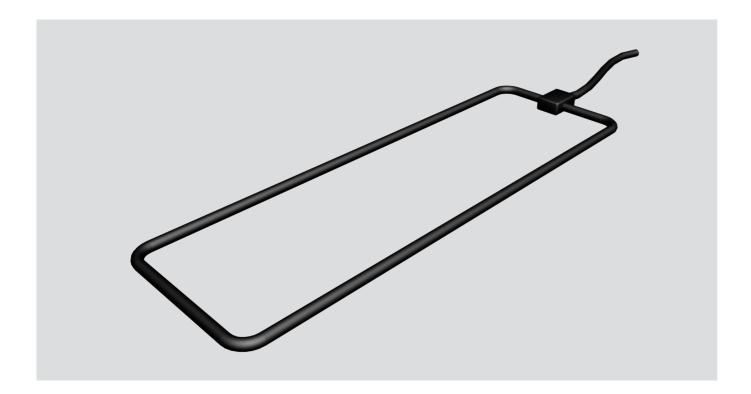
Q4 Guidance Lamp IP-GL1000

05 Floor Lamp IP-FL1000

O6 Alarm Light IP-AL1000

Warning Light IP-WL1000





O1
Loop Coil
IP-LC1000

Functions

- Receives a certain high frequency magnetic field signal from the vehicle detector and transfers the magnetic quantity to the detector for detection when the vehicle enters
- Semi permanent and more reliable than the international standard
- The amount of magnetic field can be changed when the metal part is detected by the sensor
- Cable made of material that does not deform or rust even when embedded in concrete

Product Specifications

- Product Material : Teflon Cable/Zinc Plating

- Product specification: 0.75Sq galvanized wire

- Insulation resistance : $100M\Omega$ or more

- Lead wire: Standard 6m/Special 30m

- Product Life: Semi permanent

- Buried depth: within 30~80mm

- Number of turns: 3~5 times (adjusted according to site conditions)

- Installation method : buried or cut type

- Detection method : Loop magnetic field impedance detection method

- Vehicle detection: Metal object detection under the body

- Size: 1800(W) x 700(D)mm (Adjusted according to site conditions)



1st circuit vehicle detector

2st circuit vehicle detector

02

Vehicle Detector

IP-VDS1000

Functions

- Dedicated vehicle detector detects vehicles by detecting fluctuations in buried loop coil frequency
- LED lamp on the front panel indicates whether the vehicle is detected or not
- Designed for installation of underground parking lot, it is possible to use the equipment in very humid environment
- Easy to set detecting conditions by adjustable output time with no voltage relay contac
- Detection sensitivity can be adjusted according to the vehicles

Product Specifications

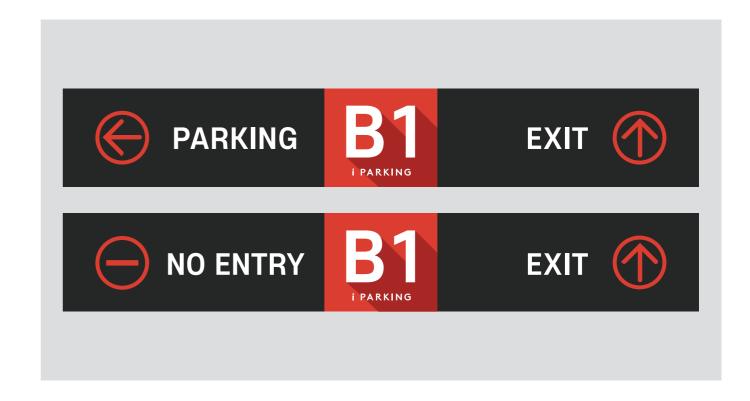
- Operation Mode: 8 Mode Selection Function
- Display: Red LED (Power), Green LED (Detection), Yellow LED (Timer)
- Frequency conversion : High & Low 4 levels adjustable
- Sensitivity control: 10 levels adjustable
- Power consumption: 2W at all times, 25W during operation
- Size : $135(W) \times 97(D) \times 41(H)$ mm
- Enclosure Material/Color: ABS Material/Black
- Power supply: AC 220V, 60Hz

Related Model Name

Product name	Specifications	Model name
Vehicle detector	Circuit 1 vehicle detector	IP-VDS1000
Vehicle detector	Circuit 2 vehicle detector	IP-VDS1050

53 | Signal Control System | 54





Vehicle Count Panel

IP-VCP1000

Functions

- This equipment counts vehicles by receiving vehicle detection signals from vehicle detectors on each floor and provides this information to floor level cars and entrance cars
- All setting and control methods are easy to set and operate with 16 keys
- Connection between various boards is easy to replace and repair with plug-in module type
- Possible to set and release of the full car indication of each floor
- Online communication is possible on the site conditions, and it can be connected to vehicle detectors, entrance cars, etc.
- Easy to set detection conditions by adjustable output time with no voltage relay contact
- Detection sensitivity can be adjusted according to the vehicles

Product Specifications

Type and structure: Wall TypeEnclosure Material: Steel, Paint

- Power: AC 220V/60Hz

- Power consumption: 50W Max

- Central Processing Unit: ATMEGA128 (8Bit RISC)

- Self clock is possible

- Host communication function (RS-232 or RS-485)
- Entrance level/floor level communication function (RS-485)
- External input: Up to 32ports (chatting prevention function)

- External output : Max 16port (O, C)

04

Guidance Lamp

IP-GL1000

Functions

- Installed inside the parking lot, indicating entrance/exit direction for safe operation and quick and smooth vehicle communication
- Guidance equipment that allows drivers to easily see directions and prevent collision accidents

Product Specifications

- Type and structure: Ceiling Type, single sided LED

Power Supply: AC 220V, ±10%, 60HZSize: 1300(W) x 200(D)mm (Basic size)

Related Model Name

Product name	Specifications	Model name
Guidance lamp	Both sides LED	IP-GL1050

55 | Signal Control System | 56





Detailed design is subject to change

05

Floor Lamp

IP-FL1000

Functions

- Device that guides the driver to park the vehicle smoothly by displaying the full level of each floor in the parking lot
- Parking information on each floor is displayed to inform parking information of each floor
- Mark "FULL" when the floor is full
- New information is displayed by receiving information of each floor from Vehicle Count Panel

Product Specifications

- Type and structure : Ceiling Type

- Enclosure Material: 1.2T AluminumExtrusion

- Power: AC 220V, 50/60Hz

- Display element : Digital FND (maximum 999)

- Power consumption: 30W

- Power supply: AC 220V, ±10% 60Hz

- Temperature: -25°C ~ 70°C

- Humidity: 90% or less (No condensation)

- Elements: LED 96×96mm module

06

Alarm Light
IP-AL1000

Functions

- Alarm sound: minimizes loud noise and notify alert by producing alert sound
- Rotating alarm light: LED display part, operates simultaneously with alarm sound
- The highly bright LED lamp is used for BACK Light so enough illumination is emitted for outdoor use
- It operates by receiving signal from vehicle detector and controlled by timer

Product Specifications

- Shape and structure : Ceiling Type

- Mode of operation : operation by the signal received from the vehicle detector

- Input voltage : AC 220V, 60Hz

- Size: 130(W) x 130(D) x 200(H)mm

- LED: Alarm indicator display 12V, 350mA, 4.2W

– Alarm light: Max 12V, 350mA, 4.2W, 90dB

- Power consumption: 12V, 700mA, 8.4W Max

- Brightness: 12,000mcd

57 | Signal Control System | 58



Warning Light IP-WL1000

Functions

- Alarm sound : Minimizes noise pollution and improves alertness by operating intermittent sound during operation
- Rotating alarm light: LED lamp operates simultaneously with alarm sound
- Mode of operation : operation by the signal received from the vehicle detector
- Letter Color : White
- The highly bright LED lamp is used for BACK Light so enough illumination is emitted for outdoor use

Product Specifications

- Shape and structure : Standalone waterproof type
- Operation Type: operation by the signal received from the vehicle detector
- Input voltage : AC 220V, 60Hz
- Size: 198(W) x 198(D) x 1130(H)mm
- LED: Alarm Light Display 12V, 350mA, 4.2W/Acrylic Display 12V, 600mA, 7.2W
- Alarm light: Max.12V, 350mA, 4.2W, 90dB
- Power consumption: 12V, 1300mA, Max 15.6W
- Brightness: 12,000mcd

i PARKING

D

Guidance Control System

Through ultrasonic sensor (ultrasound induction method) or parking surface camera (image induction method) installed in parking lot

The status of parking lot is displayed, so it allows fast and convenient parking.

01 Ultrasonic Sensor IP-US1000

02 Ultrasonic Indicator Light IP-UIL1000

03 Local Control Unit IP-ANT

Central Control Unit IP-CCU1000

Parking Guidance Server
IP-PGS1000

06 4-Side Location Camera IP-SLC1000

07 PoE Hub IP-PH1000

08 PoE Case IP-PC1000

09 Vehicle Find Kiosk IP-KI1000

10 DB Server IP-DBS1000

Image Analysis Device

12 Server Rack IP-SR1000

13 KVM Switch IP-KS1000

Backbone Switch

Parking Management Computer IP-PMC1000

16 UPS IP-UPS1000

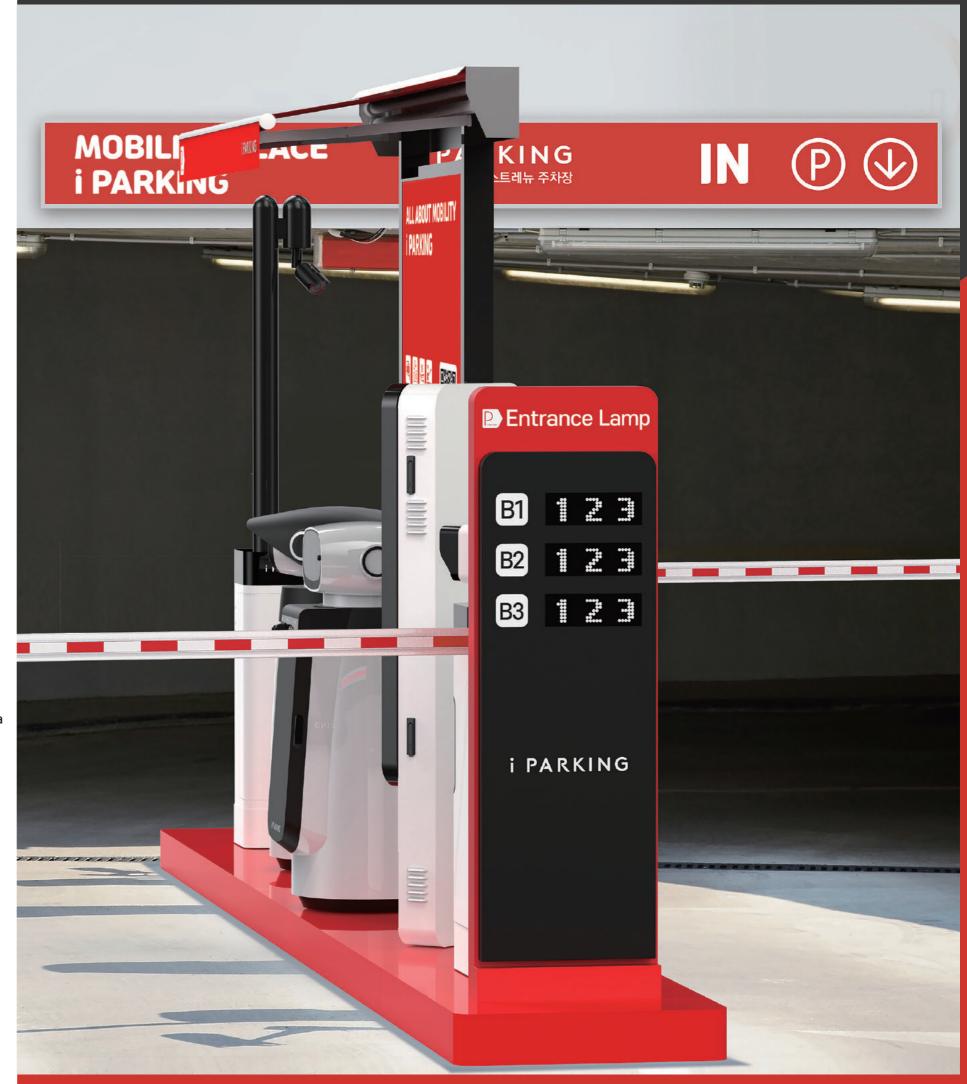
Emergency Bell IP-EB1000

18 Entrance Display IP-ED1000

19 Block Guidance Display IP-BGD1000

P-FGD1000

21 Guidance Display IP-GD1000







Ultrasonic Sensor

Functions

- Device installed at every parking bays in the parking lot needs to be managed to detect the presence or absence of a vehicle and provide a signal to the controller
- Ultrasonic sensor integrated LED is installed for easy identification on the vehicle driving path in the parking lot
- Easy identification of moving vehicles in 4 directions
- If the parking side is empty, the green LED is on, and if it is parked side, the LED of different colors is turned on or off to prevent crosstalk (normal color: red when detected)
- Display part: LED

Product Specifications

- Sensor type: Ultrasonic sensor (receiving type of transmitter and receiver)
- Detection indicator : Detected (flashing or red), undetected (green)
- Display distance : 30m or more
- Input voltage : DC12V
- Operating Temperature : 25°C ~ 75°C
- Humidity: 85% or less
- Detection distance: 100 mm ~ 4,000mm
- Outer material : Flame retardant ABS
- Communication: Non polar 2 wire DC POWER LINE (FM0)
- ID setting : 1 ~ 127
- Detection accuracy : More than 99.9%
- Size: 99(W) x 69(D) x 40(H)mm

02

Ultrasonic Indicator Light

Functions

- LED light guide plate for easy identification in the vehicle driving path in the parking lot, installed to be easily seen in the vehicle aisle, and guide driver to park in a designated bay
- If a parking bay is available, the green light is on, and if the parking bay is occupied, red light is displayed
- Ultrasonic sensors for individual parking bays can be designated by each block
- Interlocked with the ultrasonic sensor

Product Specifications

- Shape and structure: Ceiling or column wall type
- Display type: High brightness LED
- Input voltage : DC 12V
- Operating Temperature : -25°C ~ 75°C
- Humidity: 90% or less (no condensation)
- Enclosure material : LED light guide plate (acrylic)
- Size: 150(W) x 30(D) x 165(H)mm
- Communication: Interlock with parking surface sensor Relay Contact
 - 2 Point (DC 12V external input)

Guidance Control System | 64

- Environment : Indoor
- Display: Green, Blue, Red, Disabled Mark Display





Local Control Unit

IP-ANT

Functions

- Function to calculate and detect the parking status by the ultrasonic sensor and transmit it to the upper level parking guidance server
- Controls the scanning of ultrasonic sensor, and provides information to space indicator, block guidance display light, and floor guide board

Product Specifications

- Criminal and Rescue: Wall Mount

- Input voltage: 220v, 60Hz

- Operating Temperature : -25°C ~ +50°C

- Humidity: 90% or less (No condensation)

- Enclosure Material: Steel 1.2T Ivory (installed inside PHC enclosure)

- Communication: TCP/IP, power line communication, RS 485

- Power consumption: 5W (Max)

- Size: 161(W) x 93.7(D) x 40.5(H)mm

Central Control Unit

IP-CCU1000

Functions

- Integrate the data collected from the zone controller and transmit it to the upper parking guidance server
- Provides information to Scan control, space display, block induction light and floor guide board of ultrasonic sensor

Product Specifications

- Criminal and Rescue: Wall Mount

- Input voltage : 220v, 60Hz

- Operating Temperature : -25°C ~ +50°C

- Humidity: 90% or less (No condensation)

- Enclosure Material: Steel 1.2T Ivory (installed inside PHC enclosure)

- Communication: TCP/IP, power line communication, RS 485

- Power consumption : 5W (Max)

- Size: 161(W) x 93.7(D) x 40.5(H)mm

65 | Guidance Control System Guidance Control System | 66





Parking Guidance Server

IP-PGS1000

Functions

- Device that provides various statistical information by real time management of transmitted information and records and organizes parking lot operation data
- Ability to control each equipment in the parking lot by recording and comprehensively managing the data received from the zone controller
- Manage and control all ultrasonic sensors in the parking lot and implement of various additional services through communication with other side
- The collection control software of the parking guidance server collects the information received from each parking bays and aisle in real time, and provides various statistical information
- Output voltage is adjustable with no-voltage relay contact output method, and it makes easy to set detection conditions
- Detection sensitivity can be adjusted according to the vehicles

Product Specifications

- Inputvoltage: AC 220V, 50/60Hz
- CPU: Intel Core i5-6400 Processor (2.7GHz, 1MB) or higher
- Memory: 4GB DDR3L Memory at 1600MHz (4GB x 1) or more
- HDD: 500GB (7200rpm SATA3) or higher
- Operating system : Windows® 7 Professional or later
- Graphics: Intel® HD Graphics 520 (DSub, DVI-D)
- Network : Gigabit LAN
- Input Device: Keyboard, Optical Mouse
- Monitor: LCD 19 "or above



06

4-Side Location Camera

Functions

- Device that installs every 3 parking bays in a parking lot that requires management to provide a signal to the controller after detecting the presence or absence of a vehicle
- LED integrated location camera is installed for easy identification of the vehicle driving path in the parking lot
- Easy identification of moving vehicles in 4 directions
- If the parking bay is empty, the green LED is on, and if it is parked, the LED of different colors is turned on or off to prevent confusion (Basic color: Red)

Product Specifications

Image Sensor: 1/1.8 "CMOS Sensor
Max Resolution: 2592 x 1944 Pixels
Lens Type: Motorized Vari focal
Focal Length: f = 3.5mm 10mm

- Aperture : F1.6~2.7

- Lens Information (IR Corrected) : Supported

- Iris Control : P-Iris

- Day and night: IR cut filter with automatic switch

- Privacy Masking: 8 Zones

- Video Compression: H.265, H.264 (MP), M-JPEG

- Ethernet : 10/100/1000 BASE-T

Operating Temperature : -10°C ~ +50°COperating Humidity : 0% ~ 90%

- Power: PoE, 12VDC





Functions

- Supports with PoE hub supply power to 24ea of 802.3 af IP based devices and Power-over-Ethernet (PoE) optimizes power and configuration management of network equipment such as wireless AP, Voice over IP (VoIP) call and IP-based camera
- Transmit image and data received from parking bay camera to video analysis device
- 28 each of RJ-45 port automatically guarantee the highest speed, support auto uplink features
- 24 each of 10/100 Mbps ports(4 PORT is SFP combo) and 2PORT-1000BASE-X for uplink
- DC 36~57V power supply to parking bay camera
- Provides data and power simultaneously using by function of IEEE802.3af PoE on all 24 ports

Product Specifications

- Specifications: 24 PORT 10/100

[Power Supply]

Power consumption: 225W max100-240VAC/50-60-Hz universal input

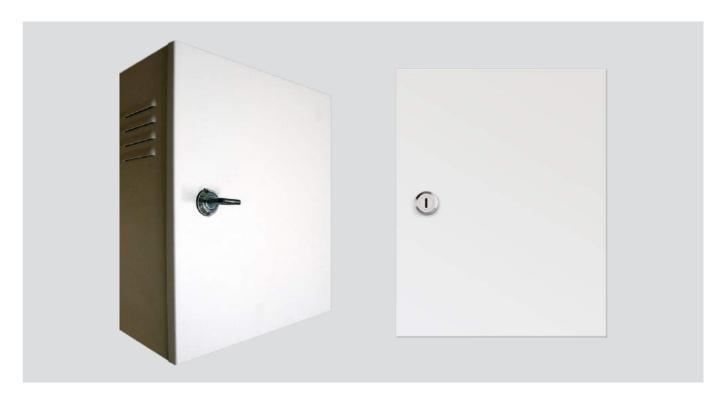
- PoE budget: 195W

[Network Ports]

- 24 10/100 Mbps auot sensing Fast Ethernet
- 2 10/100/1000 Mbps auot-sensing Gigabit Ethernet

[Switching ports (RJ-45)]

[- 2 ccombo Gigabit copper/SFP slots]



Detailed models are subject to change

08

PoE Case

Functions

- General function: Protect PoE from damage, dust and external shocks
- Robustly manufactured for safe protection from external shocks
- Robustly built to protect from dust
- Install FAN to vent heat inside
- Up to two PoE hubs can be embedded

Product Specifications

- Specification : Wall Mount

- Material : STEEL 1.5T

- Size : $550(W) \times 615(D) \times 250(H)$ mm - Earth leakage barrier gate : 1EA (15A)

- Internal lighting: LED light (for maintenance)



Detailed models are subject to change

Vehicle Find Kiosk

IP-KI1000



Functions

- It is possible to search by inputting 4 digits of plate number, and provides the service for driver convenience by displaying the shortest route from the current position to my car position
- Display all license plate and parking position
- If there are two or more vehicles of the same plate number, the entire license plate will be displayed
- Visibility is secured by blinking LED at side part $\,$

Product Specifications

[Display specifications]

- Country of origin/manufacturer: Taiwan/AUO

- Specification: 31.5inch/16: 9

- Size: 413.7(W) x 28.6(D) x 719.2(H)mm

- Resolution: 1920 x 1080 Pixels

- Brightness : 1000 (cd/m2)

- Contrast Ratio: 3,000:1

- Power input: DC12V, 0.36A

[Stand specifications]

- Size: 520(W) x 350(D) x 1800(H)mm
- Floor fixing: anchor fixing and Standalone

waterproof type

- Weight (total): about 109kg

[Android board specifications]

- Main chipset: ARM Coretex A9 1.8GHz Quad Core

- System Memory: DDR3 1G RAM

- Internal Storage: USB Memory (8GB default size in the package)

- O/S: Android 4.4 Kitkat

Related Model Name

Product name	Specifications	Model name
Parking Location Finder	42"	IP-KI1003
Parking Location Finder	50"	IP-KI1005



10

DB Server

IP-DBS1000

Functions

- It is installed at the center and provides parking history information to the parking data storage, parking location checker and parking operation computer of the image analysis device
- Manage the address of each parking surface camera so that videos taken by the parking surface camera can be viewed by searching plate number or time
- It must be able to be displayed on the necessary channel at all times and manage the channel to monitor the parking lot condition on the basis set by the operator
- Interworking DB to integrate all data generated from parking surface management
- Manage to interlock data that can be provided to upper level system
- Provide real-time data for parking lot operation management

Product Specifications

- PROCESSOR: Intel® Xeon E5-2620v4 8core 2.1GHz/20M 2CPU
- Memory: HPE 8GB 1Rx8 PC4-2400T-R Kit x 2EA
- Hard Disk: HP 300GB 12G SAS 10K 2.5in SC ENT HDD x 2EA
- OS (Operation system): Windows Svr Std 2012R2 64Bit Korean DSP
- DataBase: MS-SOL 2014
- Graphic: Integrated Matrox G200eH2 video standard with 16MB of Video RAM
- Controller: HP Smart Array P440ar/2G FIO Controller
- Network controller: Embedded 4 x 1Gbe NIC





IP-IAD1000

Image Analysis Device

Functions

- Stores and analyzes the images transmitted from the parking surface camera and can view the stored data remotely
- Saves and processes images by detecting even small movements from camera
- Possible to save and recognize license plate with transmitted image
- Receives the video of the vehicle and detects the parking status and the plate number (full letter/number)
- Search by date, time, camera, and have double speed & zoom search functions

Product Specifications

- 19 'rack mounted, with operating S/W

- CPU: Intel® Quad-Core Xeon (2.2GHz) or higher

Memory: 8 GBHDD: 9.5TB

- Communication : TCP/IP

- Communication speed: 1 Gbps

Monitor interface: up to 1280 x 1024 or moreNumber recognition speed: 60 times/sec

OS: Windows7 ProfessionalPower consumption: 600W



Detailed models are subject to change

12

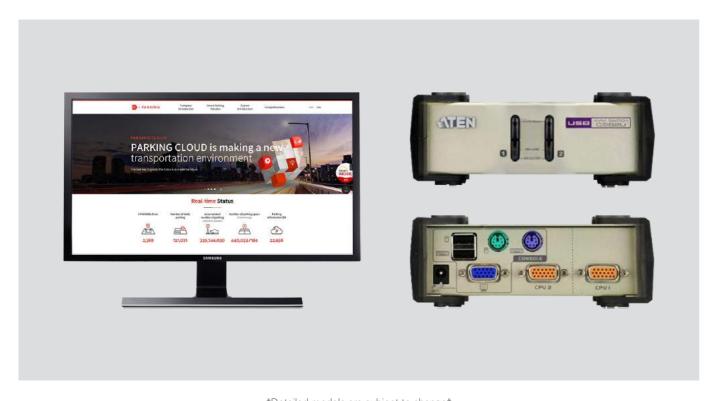
Server Rack
IP-SR1000

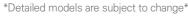
Functions

- Efficient connection, distribution and arrangement of cabling such as network equipment and data/voice in medium and large computer room, disaster prevention room and MDF room
- IPU, DB server, backbone, UPS, KVM, monitor, key board, mouse can be installed
- The front and rear doors are well ventilated
- Install FAN to vent heat inside

Product Specifications

- 19 Standalone Type
- Size: 600(W) x 960(D) x 2000(H)mm (42U)
- Front Door x 1ea (Air Vented)
- Rear Door x 1ea (Air Vented)
- Side Panel Units (pair)
- Ground Plate x 1ea
- Slide Shelf for K/B x 1ea
- Fixed Support Shelf x 2ea
- Fan Units: 120mm x 4 Fan (220V/AC)
- Power Unit: 10Ways Power Distribution Unit * 2
- Caster & Leveller Foot x 4ea
- Cagenut & Bolt (1set)







IP-KS1000

KVM Switch

Functions

- Automatically monitor eight computers in one place with one monitor, keyboard, mouse and audio
- Can be mounted in a 19 " system rack
- The monitor is installed in NVR server and RACK respectively, and can display data from each device

Product Specifications

- 19 'rack mounted, monitor included
- Size: 440(W) x 185(D) x 42(H)mm
- Input : AC 220V, 50/60Hz
- Control Mode: KEYBOARD, VIDEO, MOUSE (USB TYPE)
- Control range: 8 PORT - LED display: LED LAMP
- PC selection method: HOT KEY and button, OSD
- Internal secondary power supply: DC 9V 300mA (Min)
- Power consumption: MAX 400mA - Monitor resolution: 1280 x 1024 Pixels
- Monitor size: 48cm/19inch



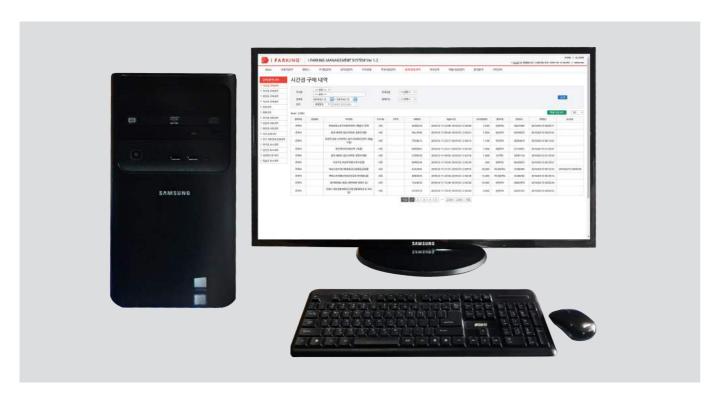
Backbone Switch IP-BS1000

Functions

- It is located at the center of the network and delivers the traffic in the network to external terminal or vice versa to the terminal switch in the network at 35.7Mpps packet processing rate
- Equipment is connected to the network and transfer the processed data from the parking devices and DB server smoothly to the database server to eliminate data bottlenecks
- Reliable service and flexible network configuration

Product Specifications

- 24-Port 10/100/1000 BASE-T
- Switching capacity: 88 Gbps, Throughput: 35.7 Mpps
- Flash memory: 40 MB
- DRAM: 256MB
- Service port : 16-Port 10/100/1000BASE-T (RJ-45 Type)
- Uplink Interface: 8-Port Combo type port-1000BASE-X (SFP Type) or
 - 10/100/1000BASE-T (RJ- 45)
- Console: 1 Console port, RJ-45-to-DB-9
- MGMT: 10/100BASE-TX (RJ45)
- Operating Temperature : 0 ~ 50°C (32 ~ 122)°F - Power supply: AC type: 100-240 VAC, 50/60Hz
 - DC type: DC 5V, 30A (150W)



Detailed models are subject to change

Parking Management Computer

IP-PMC1000

Functions

- Monitoring the status of available parking bays from server and parking guidance system, and check the exact parking bay of the specific vehicle
- Matching of parking bay number and plate number are possible
- Alarms are displayed at the same time of equipment failure, and enables the history management
- Display the number of available parking bay at each floor
- Parking time and status management function for each vehicle by selecting the parking surface
- History check of each parking bay

Product Specifications

[General]	[Advanced]
- Power: 350W	- Power: 750W
- CPU: i5-8500	- CPU: Intel Xeon W-2104
- Memory: 8GB	- Memory: 16GB
- HDD: 1TB	- HDD: 1TB*2
- Communication : LAN communication	- Communication : LAN communication
- Communication speed : 1Gbps	- Communication speed: 1Gbps
- Monitor size : 24inch	- Monitor size : 24inch
- OS: WINDOWS 10	- OS: WINDOWS 10



16

UPS
IP-UPS1000

Functions

- It is a device for supplying constant voltage and constant frequency power to the equipment by installing it at each parking lot. It provides high quality power without any interruption even in the case of power failure
- Status LCD Display/Self Diagnosis Function
- Battery Management System/Fully ON-Line Sine Wave/Sine Wave Output (THD within 3%)
- Cold Start feature
- Load capacity (%), Charge amount (%), Bypass, Temperature, Frequency,
 Battery Undervoltage/Exchange/Error, UPS Error, Overload Function

Product Specifications

- 19 'rack mounted
- Method : ON-LINE method
- Input voltage : 220V ± 25% 60Hz ± 5Hz
- Output voltage: 220V + -2% 60Hz ± 0.2%, AVR function built-in
- Waveform: Pure Sine Wave (THD within 3%)
- Power failure protection time: 15 minutes
- Alarm: Input power failure, battery low voltage, overload, equipment error
- Communication: RS-232 Communication



Emergency Bell

IP-EB1000

Functions

- Install emergency call unit in hazardous area and underground parking lot and press the button to transmit data to management PC
- Real-time two-way call is possible and also operation location, time, video is display on the PC screen in real time as connecting between management PC and Emergency call unit while emergency call unit is working
- Prompt response to parking lot safety, vehicle damage and theft
- Quickly responds to emergencies by directly connecting with the camera on the parking bay
- Provides the convenience of no additional wiring to the operating center by interlocking parking bay camera

Product Specifications

- Shape: Magnetic Phone (Wall Type)

- POWER Supply: DC 5V/1A or DC12V/300mA

Network: 10/100 Base-T (RJ45)Size: 130(W) x 36(D) x 200(H)mm

PoE: IEEE802.3afI/O contact: 2CHIP CALL: SupportWeb Server: Support



Please note that the design can be changed based upon the number of modules and floors

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Entrance Display

IP-ED1000

Functions

- The occupancy status by floor in the parking lot are displayed to the drivers who are entering the parking lot
- Highly bright LED indicates available bay number, free space, congestion, full load
- Expressing phrases to guide customers using the parking lot
- Representation of letters is expressed in English or Korean as common or exclusive

Product Specifications

- Shape : Standalone type

- Size: 550(W) x 150(D) x 1800(H)mm (Based on 3 layers)

- Enclosure Material : THK 1.6T Steel

- Enclosure Color: Specified Color Powder Coating

- LED Module: 96(W) x 96(H)mm LAMP

- LED Module Quantity: 5 columns of 1 column 3 columns (example)

- Module Color: 3 Color (Red, Green, Yellow Green)

- Light source : LED Back Light

- Stationery: LED Display/Sheet Cutting/Laser Cutting/Silk Printing





Block Guidance Display

IP-BGD1000

Functions

- Provides parking occupancy status and route to park in the real time
- Displaying drive way via direction indicator or direction sign
- Displaying information on disabled parking spaces
- Enables to show phrases that you want to inform your customers

Product Specifications

- Type : Ceiling Type

- Input voltage: 220v, 60Hz

- Operating Temperature : -25°C ~ +70°C

- Humidity: 90% or less (no condensation)

- Device: LED 96 x 96mm module (SMD), 2 module x 1 stage x 2 direction (8 module)

- LED module color: 7 colors (Red, Green, Blue color combination)

- Communication: RS-485

Related Model Name

Product name	Specifications	Model name
Block guidance display	1 direction for both sides, LED	IP-BGD1005
Block guidance display	2 direction for one side, LED	IP-BGD1050
Block guidance display	2 directions for both sides, LED	IP-BGD1055



Floor **Guidance Display** IP-FGD1000

Functions

- Shows the number of vehicles that can be parked when inducing the vehicle's entry direction and entering the floor
- Parking number is displayed by number and letter through floor guide board
- Show phrases that you want to inform your audience

Product Specifications

- Type: Ceiling Type

- Enclosure Material: Aluminum, Anodizing - LED Module: 128(W) x 128(H)mm SMD

- LED Module Quantity: 1column 2rows 1direction=2EA

- Module Color: 3 Color (Red, Green, Yellow Green)

- Light source : LED Back Light

- Front phrase: LED display/sheet cutting/actual output

- Back Station : Seat Cutting or Formax

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SLOW DOWN



Guidance Display

IP-GD1000

Functions

- Induction/exit guidance and entrance directions are displayed inside the parking lot to guide the driver to ensure safe driving and fast and smooth vehicle communication

Product Specifications

- Type : Ceiling Type

- Power supply : AC 220V, AC 220V, ± 10%, 60HZ

- Power consumption : Always 32W - Light source : LED BACK LIGHT

- Size: 1300(W) x 250(H)mm

- Enclosure color : Can be negotiable

Related Model Name

Product name	Specifications	Model name
Guidance display	Both sides	IP-GD1050

i PARKING

KIOSK System

i PARKING KIOSK product can be installed in various environments through various options such as wall and stand, and it has strong durability. The design is slim and match the environment naturally with monotone colors.



Smart Simple KIOSK

IP-KI2000 (18.5)



Functions

- 18.5 "Kiosk with Wall, Stand, and Pole Type for Various Environments
- i PARKING Kiosk is implemented in various environments such as restaurants, restaurants, shops and Parking lots
- You can pay by card, mobile NFC payment, etc. The manual is included at the bottom so that customers can easily recognize and use it
- Color LCD touch screen makes ordering and payment simple and easy
- It is possible to expose logos of restaurants, and stores by splitting in the screen to maximize advertising effects by sending advertisements while standby

Product Specifications

[Product specifications]

- Display: 18.5 inch LCD display
- Touch method: Pressure sensitive touch screen (waterproof)
- Printing device: 3 "Thermal printer
- Payment Method : Barcode, mobile NFC payment, credit card (IC Card)
- Network: LAN (TCP/IP) 10M/100Mbps
- Rated voltage : AC 220V ± 10%, 50/60Hz
- Environment : Temperature –20°C ~ +60°C

(Based on using temperature compensation fan/Heater)

- Humidity: +10% ~ +80% (No condensation)
- PC specification : Windows based

[Size]

- Simple type KIOSK (Wall Mounting Type) : 500(W) x 210(D) x 836.3(H)mm
- Simple type KIOSK(Stand Type) : 500(W) x 403(D) x 1374(H)mm

[Weight]

About 40kg

Simple KIOSK (Wall Mounting Type)

IP-KI2000 (18.5)



Simple KIOSK (Stand Type)

IP-KI2001 (18.5)



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Smart WIDE KIOSK

IP-KI2000 (32)



Functions

- 32 "display kiosk with wall, stand, and pole type for various environments
- i PARKING Kiosk is implemented in various environments such as restaurants, restaurants, shops and Parking lots
- It is possible to pay by card, Samsung pay, etc. and the manual is included at the bottom of KIOSK so that customers easily recognize and use it
- Easy ordering and payment with color LCD touch screen
- It is possible to expose logos of restaurants and stores by splitting in the screen to maximize advertising effects by sending advertisements while standby

Product Specifications

[Product specifications]

- Display: 32 inch LCD display
- Touch method: Pressure sensitive touch screen (waterproof)
- Printing device : 3 "Thermal printer
- Payment Method: Barcode, mobile NFC payment, credit card (IC Card)
- Network: LAN (TCP/IP) 10M/100Mbps
- Rated voltage : AC 220V ± 10%, 50/60Hz
- Environment : Temperature -20°C ~ +60°C

(Based on using temperature compensation fan/heater)

- Humidity: +10% ~ +80% (No condensation)
- PC specification: Windows based

[Size]

- WIDE KIOSK (Wall Mounting Type): 500(W) x 210(D) x 1295(H)mm
- WIDE KIOSK (Stand Type) : 500(W) x 497(D) x 1839(H)mm
- WIDE KIOSK (Cash Card Type) : 500(W) x 497(D) x 1839(H)mm

[Weight]

- About 55kg

WIDE KIOSK (Wall Mounting Type)





WIDE KIOSK (Stand Type)

IP-KI2001 (32) WIDE I

WIDE KIOSK (Cash Card Type)

IP-KI2002 (32)



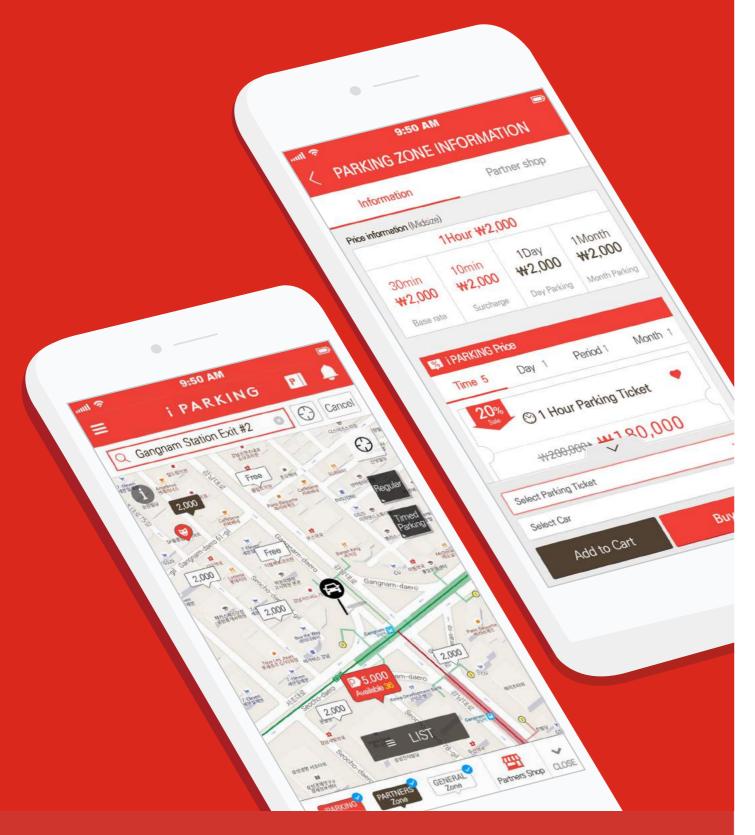


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MOBILITY PLACE i PARKING



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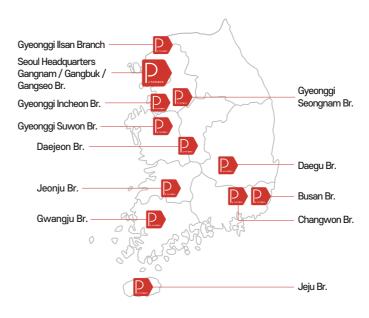
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