

## → SPECIFICATION

<b>Processor</b>	Intel Pentium 4, 3.0Ghz CPU
<b>Memory</b>	1GB DDR RAM
<b>Storage</b>	500GB SATA Hard Disk
<b>Graphic Card</b>	128MB VGA Card
<b>Capture Image</b>	<p>Video Grabber Card</p> <p><b>Features :</b></p> <ul style="list-style-type: none"> <li>→ Streaming with Four Simultaneous Video Digitizers</li> <li>→ Quick Switching</li> <li>→ Expandable Architecture</li> <li>→ 64-bit</li> <li>→ 66 MHz PCI Bus</li> <li>→ Maximizing Performance</li> <li>→ On-Board TTL I/O Lines</li> <li>→ Video Image Formats</li> <li>→ Watchdog</li> </ul>
<b>Operating System</b>	Windows XP Professional

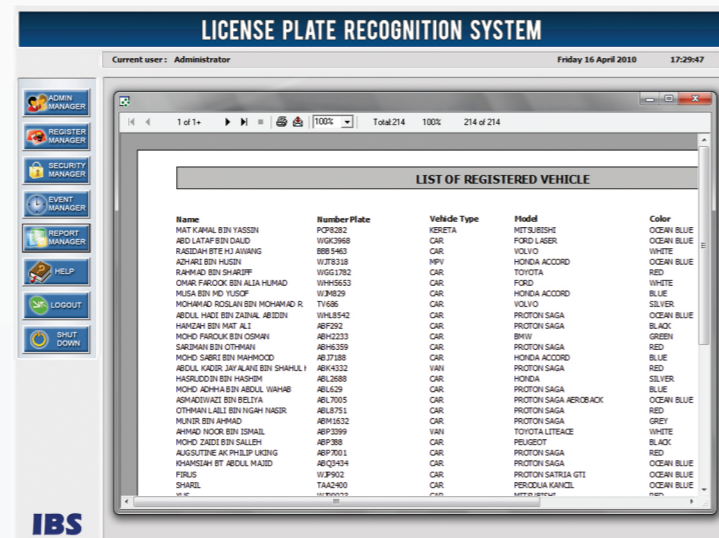
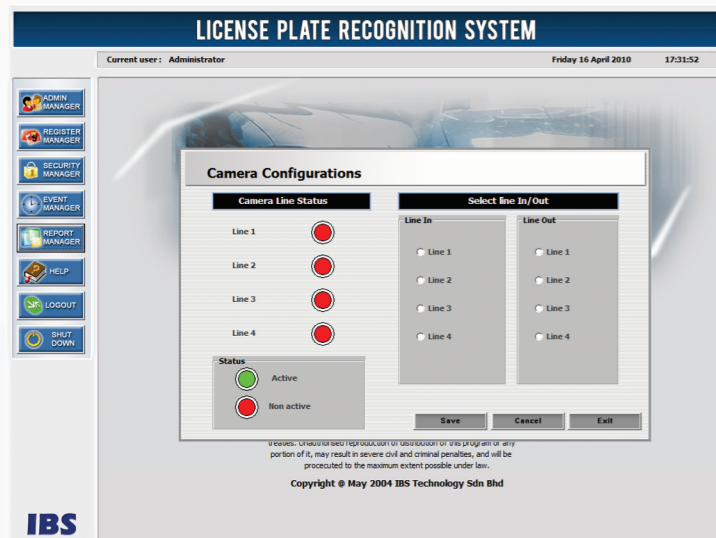
# LPRS3000

## LICENSE PLATE RECOGNITION SYSTEM



LPRS3000 is a License Plate Recognition System that can be used in recognizing vehicle license plates for various applications such as Parking Management, Toll Booth Operation and Traffic Management. The LPRS3000 utilizes Image Processing, Neural Networks and Artificial Intelligence techniques to accurately recognize number plates. It is capable of the automatic detection, identification and recognition of the license plate of any kind.

With LPRS3000, users are able to achieve both automation and security. LPRS3000 is able to detect and record license plate numbers on moving cars, and compares them in real-time to "Wanted List" data to offer alarms where and when needed - specifically for proactive security and integration into parking management systems, allows LPRS3000 to automate vehicle entry to and exit from a car park or a secure zone and to use the recognized registration number for auditing.



The most common use of LPRS3000 is to integrate with parking management system. With this integration, you are able to achieve the following :

- Flexible and automatic vehicle entry to and exit from a car park.
- Improved security for both car park operators and car park users.
- Improved traffic flow during peak periods.
- Vehicle recognition through date and time stamping.

### KEY FEATURES

Flexible and automatic highway toll collection systems

Analysis of city or highway traffic during peak periods

Reduce Vehicle Theft

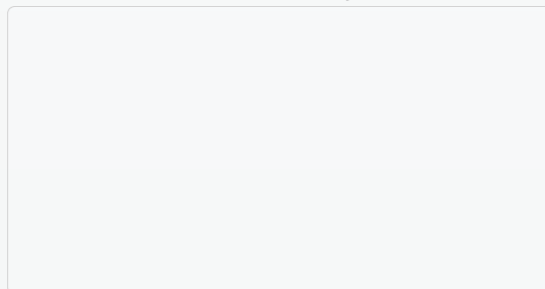
Effective law enforcement and enforcement of traffic rules

Highest efficiency for border control systems, etc. Building a comprehensive database on traffic movement

Automation and simplicity of parking management

Security monitoring of roads, checkpoints, etc

For Further Information, please contact



## ➔ BENEFITS OF LPRS3000

LPRS3000 supports both the standard Single Row Number Plates and Multiple Row Number Plates.

Supports special number plates such as Putrajaya, Satria, Waja, Bambee, Cursive fonts, Diplomat License Plate and Reflective type plates.

Able to work in all situations whereby; Car plates of different shapes and sizes, Day/Night Use, Rain/Sunshine and Non-reflective/Reflective plates.

LPRS3000 is able to identify correct number plate syntax, format and positioning and detect number plates on moving vehicles.

It works on angles of up to 45° in deviation or inclination and able to respond within 5 seconds from the capture of car image to the recognition of the number plate.

LPRS3000 is suitable to recognize license plate images pre-registered in database.

It is able to use video input from a video capture card and provides different camera views by selection.

## ➔ PARKING SYSTEM OPERATION AND INTEGRATION

In the parking industry, lost revenue due to fraud is a major concern. Another concern is car theft whereby anybody with parking tickets is able to bring out any car from the parking lots. Integration between our LPRS3000 and any Parking Management System allows parking operators to curb both the problems.

With the LPRS3000, the number plate image is captured for every vehicle entering the parking facility. The tickets issued will be encoded with the license plate and each image is date and time stamped and stored in a central database for future reference. At the time of vehicle exit, a second number plate image is captured and automatically registered against the entry data to confirm parking duration and system will verify to ensure the ticket with encoded plate number matches with the plate number of the car exiting. This approach eliminates both revenue loss and car theft.

The vehicle approaches the gate of the parking lot and there is a barrier stopping it. There is a loop sensor installed at the entrance in order to sense the arrival (and the presence) of the vehicle. There is also a CCTV camera mounted to a pole at the entrance and the ticket dispenser. The loop sensor, the barrier and the parking ticket dispenser are all connected to the parking management

system software whilst the camera is directly terminated to the LPRS3000 Controller.

As the vehicle arrives the loop sensor senses its arrival and gives a signal to the parking management software meaning: "car arrived". This signal is processed and sent to the LPRS3000 Controller. The LPRS3000 via the frame grabber card captures the vehicle license plate and the LPRS3000 module will analyze the digitized picture and read the license plate number of the vehicle.

After reading the license plate number the LPR module returns the read plate number in ASCII to the parking management software. At a software level, communication between the LPRS3000 controller, Server, Workstation and the parking management system is through TCP/IP. Then the parking management software will use the ASCII to encode the plate number inside parking ticket before releasing the parking ticket through the ticket dispenser.

Installation of the CCTV Recognition Camera and the license plate should be between 9 – 11 meters with height of the camera at approximately 3 to 4 meters. An infrared illuminator or spot light is recommended to provide clearer vision on the license plate during the night.

## ➔ SYSTEM DIAGRAM

