

WINTONE[®] Automatic Number Plate Recognition (ANPR) Engine

INTRODUCTION

Automatic Number Plate Recognition system, as a high performance core engine, is Wintone's another special form of OCR (Optical Character Recognition) technology application. It is responsible for reading vehicle registration plate information from raw imagery, namely, automatically convert digitized image of vehicle license plates into editable license plate text.

Nowadays, Wintone ANPR engine has been able to accomplish real-time recognition with different vehicle registration plates of China, HongKong, Taiwan, and Macao's.

More Importantly, Wintone ANPR engine can provide CUSTOMIZABLE SOLUTIONS based on developing many varying types of plates worldwide because of our superior core engine, especially for the different vehicle registration plates with normalization without random handwriting, such as Letters, Numbers, Simplified/Traditional Chinese, Japanese, Korean, and Arabic Characters on the vehicle plates

Wintone ANPR engine with **THREE** solutions

◆ Windows, and Linux

To be able to provide the simple SDK, samples, Demo, Active X components, Specification, USB dangle (as a hardware key to be used to license and be integrated into your system

◆ Embedded system

To be able to provide the static link library to accomplish the recognition functions of reading vehicle plates information by embedding it into user's application.

■ Specially applications:

To be embedded into your intelligent/smart camera by licensing.

◆ Android, WinCE, Windows Mobile

To be able to provide a simple SDK, Demo, and Specification;

Applications:

- Tablet computer
- Mobile Police system
- other mobile devices

SPECIFICATION (ANPR Engine):

Items	Description
ANPR licenses types	Still image, Video
Supported camera types	Analog camera, High-definition/Digital camera, IP/Smart camera
Multi-threading supported	1 lane, 2 lanes, 4 lanes, 8 lanes, 16 lanes (which depending on your system performance)
Types of Recognition	Support multi-lane number plate recognition from video/image of Analog/digital captured
Input formats	JPEG/Bitmap/TIF/Video/YUV/IP camera

Output	Lane channel, Number plate number, Color, Pixel width, Recognition time, Recognition credibility
Recognition Rate	Day≥98%, Night≥94%
Recognition speed (RS)	Image from Analog camera captured: 25fps/s, RS for 1 image ≤50ms; Image from Digital camera captured: <ul style="list-style-type: none"> ◆ 1.3Megapixel Camera: RS for 1 image ≤100ms (whole image)/75ms (with selected recognition area of whole image) ◆ 2.0Megapixel Camera: RS for 1 image ≤120ms (whole image)/120ms (with selected recognition area of whole image) ◆ 5.0Megapixel Camera: RS for 1 image ≤300ms (whole image)/200ms (with selected recognition area of whole image) (Minimum system requirements: dual-core processor, 2.5G, 2G memory)
Vehicle speed	≤200km/h
Number plate pixel width	60 – 400 pixel
Programming languages	Visual C/C++ 6.0 or later, C#, Visual Basic, JAVA, .NET
Operation system	windows2000、XP、7、Linux
Trigger	<ul style="list-style-type: none"> ◆ Auto-trigger ◆ Support virtual coil trigger (which is another application in Intelligent Traffic system which can be used in highway solution, image stream captured from high-definition camera to be read)
Software Development Kit features	Including DLLs, OCXs, Demo, Samples (support for VB/VC/C++, etc.), Help documents
Customizable development	To be able to customized all license plate structures

APPLICATIONS:

- ◆ Car Park Management & Security system
- ◆ Access Control system
- ◆ Traffic Management system
- ◆ Border Control system
- ◆ Open Road Tolling system
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