

PRODUCT SHEET



INTRADA ALPR

Q-Free's market leading ALPR software library
with vehicle analytics.



INTRODUCTION

Intrada® ALPR (ANPR) is the Q-Free software library solution for automatic license recognition and vehicle video analytics offering an easy API for integration on any platform. Intrada® ALPR is suitable for any project, including OEM applications such as ALPR camera's, value-added functionality in embedded devices, traffic back offices, and video analysis software. Intrada® ALPR is used worldwide in speed enforcement, parking and access control, low-emission zones, congestion charging schemes, among many others.

FLEXIBLE PRICING OPTIONS

Intrada® ALPR can be licensed to fit your unique product or solution market need. This includes OEM partner advantages such as forecast-based framework contracts without purchase commitment and performance level based invoicing and incentivizing. More traditional

options include paying per license or recognition volume.

Q-Free offers a support package for Intrada® ALPR as standard for Service Level Agreements (SLA) and OEM agreements. Regular license options without SLA or

OEM agreement can opt to include an optional support contract. Support will warrant updates to the country license plate modules, bug fixes and improvements in the main engine, and customer service.

WORLDWIDE SUPPORT

Intrada® ALPR supports over 160 states and countries worldwide in continuously maintained license plate modules. Q-Free employs a dedicated team to maintain and improve existing license plates information. They identify, codify and train new license plates from real-world data sets. Q-Free ensures Intrada® can accommodate newly released license plates

on-the-fly and give trustworthy answers every time.

Intrada® warrants superior recognition performance around the globe. The ability to deploy ALPR enabled products and solutions anywhere with market leading performance gives a major competitive advantage for internationally operating

companies. Through Intrada®, Q-Free offers the same high quality and service levels anywhere. Intrada® ALPR is the reliable basis for any license plate recognition product including camera's, surveillance software and access control software.

MULTI-PLATFORM

Intrada® ALPR is available on a wide range of operating systems and platform architectures and easily ported to new ones. Intrada® ALPR is typically deployed on ARM and DSP-based camera's or road side units, PC workstations as well as large back office server systems. This makes it possible integrate the same ALPR

across a variety of product ranges and service offerings.

Regardless of the target platform it offers the same worldwide support with up-to-date license plate information, same accuracy, and the same licensing options. When building or maintaining a larger-scale system

with license plate recognition, Intrada offers outstanding options to scale in either offline or online implementations.

LEADING ACCURACY

Intrada® ALPR achieves high accuracy rates in all supported countries and states. Q-Free's dedicated license plate codification team and internal benchmarking process ensures that the quality of the engine is continuously improved and extended. In some installations a read accuracy of over 98.6% can be achieved using our ALPR video analytics only. With many large installations using

Intrada® ALPR, Q-Free trains their engine and country modules using recent real-world data.

Another feature that makes Intrada® ALPR stand out is the ability to accurately read plates even in challenging circumstances. These can be external factors, such as weather conditions, camera noise and image blurring, among many

others. With over 20 years of experience in video and image analytics Q-Free can counteract undesirable artefacts before reading the license plate.

VEHICLE ANALYTICS EXTENSIONS

Intrada® ALPR comes standard with extensions for vehicle video analytics offered through the same API. The extensions add analytics and help to increase reliability of the system, i.e. improving automation rates, and support manual. All analytics extensions are developed in-house and extensively trained on real-world data sets from Q-Free worldwide operations.

Extension

Make and Model identification (MMR)
Vehicle Color Identification
Vehicle Class Identification

Application

Recognizes make and model of the captured vehicle. MMR is successfully used in law enforcement and surveillance to quickly identify suspect vehicles.
Identifies the color of a vehicle. In most cases this is combined with MMR to aid law enforcement and surveillance.
Classifies vehicle type to support and refine road charging schemes or assist surveillance operations.

DANGEROUS GOODS EXTENSION

For road safety and warning emergency services, tanker trucks and containers are marked with dangerous goods signs. The orange sign shows the Kemler Code (hazard identification) on the top row and UN substance identification on the bottom row. Alternatively, empty signs are used to indicate cleaned containers of multiple different substances.

To increase the effectivity of these signs, traffic cameras capture these dangerous

good signs for remote inspection. To further increase effectivity in traffic safety and infomobility systems. Q-Free provides an Intrada ALPR extension. Our Intrada ALPR extension accurately detects and indentifies dangerous goods signs. The software finds and reads the orange to-line signs in an image. For each sign it returns the Kemler Code and UN number. Furthermore, it reports on empty dangerous goods signs.



BENEFITS

- Fits into any product and service offering as Intrada® ALPR engine runs on any device.
- Worldwide support allows excellent accuracy locally, and deployment worldwide.
- Licensing and pricing adjusted to the customer business model, suitable for any size ALPR integration project.
- Good return on investment with market leading accuracy for high-end performance.
- Excellent accuracy even in the most difficult of conditions with minimal user tuning.

FEATURES

- Supports over 160 countries and states worldwide including western, Arabic, and far-eastern fonts.
- Free software development kit (SDK) included with every Intrada license.
- Delegated OEM licensing and white label ALPR.
- Plenty of integration options with C/C++ and C# .NET support.
- Type code and jurisdiction identification with properly formatted license plate output.
- Extensions available to identify vehicle make and model (MMR), color and class.
- Many additional details about the image specification, recognition results and candidate ranking.
- Automatic dangerous goods recognition extensions for Kemler and UN identification codes.

TECHNICAL SPECIFICATIONS

Supported API languages	C, C++, C# and other .NET languages
Available bindings	Java, Python
Image file formats	JPG (8bit/12bit), TIFF, BMP, PNG
Raw image formats	8bit grayscale, 8bit Bayer (CFA), 12bit grayscale, 24bit RGB, 36bit RGB, YCC 4:2:2, YUV 4:2:0
Video triggering	Available
Video formats	MJPEG, H.264, RTSP, RAW frames (in memory)
Hardware Platforms	Intel 32-bit, Intel 64-bit, ARM, DSP, PowerPC
Operating System	Windows, Linux, Android, IOS, Solaris



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