The industry’s best vehicle imaging solutions

Tolling applications
Speed enforcement
Violation enforcement
Border and access control
It takes more than a camera — the VISCAM 1000

With a traffic imaging subsystem from JAI, you get a complete package capable of handling your most difficult imaging requirements: high-speed vehicles; high contrast from bright sunlight and shadows; glare and bright spots; headlights and nighttime conditions; lane changes; different plate colors and vehicle types; and much more.

JAI’s newest imaging system, the VISCAM 1000, is designed to provide superior image quality under the most demanding situations. Its advanced capabilities combine to create a new level of performance for ITS imaging, including:

+ **5-megapixel CMOS camera** – The high resolution means a single system can support single or multiple-lane applications with the pixel density required to ensure automated plate reading.

+ **72 Hz operation** – The high internal frame rate enables fast re-triggering to capture high-speed traffic and tailgating vehicles in the perfect positions for plate reading and identification.

+ **Advanced CMOS global shutter technology** – There’s no “smear” from headlights or bright spots, and no image distortion from a rolling shutter.

+ **Real-time, through-the-lens light sensing system** – Adjusts exposure up to 72 times per second to ensure that by the time the vehicle is in the optimum imaging position, the perfect settings have been selected for both the plate and the vehicle.

+ **Built-in video triggering function** – Ideal for projects where external triggering is unavailable or too costly. This intelligent algorithm detects moving vehicles and reliably (>99%) snaps images precisely when a virtual trigger line is crossed.

+ **Multi-slope high dynamic range mode** – Maintains image details even in high contrast sunlight and shadow conditions.

+ **One-image-per-vehicle concept** – JAI’s triggered approach not only ensures the highest readability, but also makes your computer systems, network, and any manual review steps much more efficient because there are fewer images to process than with free-running cameras.

= **It all adds up to the best ANPR-ready image quality**

With a higher confidence level, smaller error rate, and reduced manual review costs, for the lowest cost of operation and outstanding return on investment.

VISCAM 1000 instantly analyzes and reacts to a wide range of imaging conditions, giving you better read rates, more enforceable images, and lower back office costs.

For over two decades, system integrators, governmental agencies, roadway operators, and traffic management companies have turned to JAI for the best possible cameras and subsystems to meet their ITS imaging objectives. Why?

Because imaging for ITS applications is a critical challenge – and no one provides better ANPR-ready image quality than JAI.
24 x 7 illumination —
the TNL 50 LED flash

Whether the task is tolling, access control, speed control, or another ITS application, 24-hour operation is required. That means having an imaging system that can perform as well at night as it does during the day.

JAI’s TNL-50 LED flash unit complements the built-in, on-axis LEDs of the VISCAM 1000 with a high performance off-axis illumination solution essential for maximum vehicle identification and violation enforcement. Key features include:

- Compact & lightweight system equipped with high power LEDs
- Up to 75 flashes per second for traffic bursts & image sequence
- Models with single-lane or multi-lane coverage capabilities
- Near infrared (invisible), white, or blue wavelength configurations
- Rugged IP66 and IK07 enclosure
- Long life for low total cost of ownership

Versatile day/night imaging capabilities – Using the IR illumination of the TNL-50 with the advanced filtering found in the VISCAM 1000, a single system can capture full color images in the daylight, then transition to near-infrared sensitivity for nighttime imaging of both plates and vehicles.

Unique Traffic Safety mode – And while many systems restrict nighttime illumination to invisible NIR lighting, the TNL-50 features a special Traffic Safety Mode that combines low-level continuous lighting with white or blue flash pulses to enable visible illumination of nighttime scenes while minimizing driver distraction.
High performance components—
for assembling your own solution

JAI provides a variety of additional components, both hardware and software, to enable you to configure a high performance solution tailored to your specific requirements.

**VJP-400: VISCAM Junction Panel** – The VJP-400 provides an easy way to connect VISCAM system components in a roadside cabinet. Designed for DIN rail mounting, the VJP-400 can convert the signals from up to four VISCAM camera system cables into standard Ethernet output via RJ-45 connectors while also supplying the cameras with power and trigger signals.

**TNL-25 Flash Unit** – While JAI’s flagship TNL-50 flash unit provides a powerful solution for free-flow, ORT-style installations, the compact TNL-25 offers the same high-performance LED elements at a size and price perfectly suited to slow-speed or side-fire installations. Its array of 25-LEDs delivers a bright yet diffuse lighting pattern designed for close-in geometries.

**JAI Image Server** – Acting as a gateway between the cameras and your application, the JAI Image Server can be configured to do various pre-processing tasks on images before passing them on to a file store, database or lane controller. Using either JAI-sourced or your own hardware, the Image Server can be scaled to support multiple VISCAM systems simultaneously for plate finding, plate reading, fingerprint generation, attachment of lane controller information, and/or generating a VDT (Vehicle Detection Tag). The Image Server platform can also support the use of the latest generation of AI functions for occupant recognition, class of vehicle, color of vehicle, and more.

**Traffic software** – JAI’s Vehicle Recognition Suite (VRS) gives you a powerful and customizable software platform for maximizing results. VRS’ multi-engine concept can simultaneously feed images to two or more leading ANPR packages and intelligently combine the results for the highest read rates, highest confidence, and lowest number of errors needing manual review. In addition, JAI’s patented “Matcher” software can be integrated to create a visual “fingerprint” that can identify vehicles even when plate reading fails or is limited by privacy concerns or application requirements.

With JAI’s imaging components and software platform, you can be assured of outstanding image quality leading to exceptional ANPR performance for higher revenues with lower operating costs.