

Western Systems



The Future of Detection

Vantage Video Detection

Vantage Video Detection



Iteris is the technology leader in systems and sensors for surface transportation. Through development of innovative solutions and a willingness to pioneer, **Iteris** is influential with both industry and government at the local and national levels. Ongoing market research and development of proprietary technologies has positioned **Iteris** to expand its market leadership.

In a world where traffic responsive signal operation depends on vehicle detection, the Vantage™ video detection product family from **Iteris** delivers accurate, dependable, vehicle detection with nothing imbedded in the roadway.

Vantage works day or night, rain or shine, using only video and Digital Signal Processing (DSP) technology. The system can be

installed without closing lanes, and can be moved without additional cost. Vantage works during construction when trenching causes detectors imbedded in the pavement to fail.

Best of all, Vantage costs less than imbedded detectors, and is easy to use, reducing installation and training time and expense.

The primary product offering of **Iteris** is Vantage Video Detection Systems for traffic control at intersections, giving traffic managers a tool to mitigate traffic congestion by modifying traffic signal timing.

Vantage also offers a data collection software solution for highway management systems, video surveillance systems.



Western Systems

Western Systems is your local expert in transportation, communications and network solutions. We incorporate an abundance of brands that are well known nationally and have provided significant solutions to today's traffic issues.

When you have plans to upgrade your legacy trans-

portation or communications networks, or you need information to keep up with industry trends and standards you can get the products and information you want from the experienced professionals at Western Systems.

The Western Systems team has the training, certifications and industry experience

to configure, implement, maintain and upgrade your systems - whether you want to enhance your existing system, upgrade to all-new state-of-the-art equipment or something in-between.



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Inside this issue:

Vantage EDGE2	2
Vantage VRack	2
Vantage EDGE2 I/O Module	2
Vantage RZ4 Camera	3
Vantage Wireless Camera	3
Vantage EAccess	3
Vantage Video Detection	4

Special Highlights:

- Designed to Work the Way you do.
- Easy to Install
- Easy to Use
- Dynamic Zone Reconfiguration
- All Weather Performance
- Low Cost, Low Maintenance

Vantage EDGE2



The Vantage Edge 2 processor is a key component in vehicle detection systems using video image analysis. The Vantage Edge 2 processor plugs into all standard Type 170 input files, TS-1, and TS-2 card detector racks. System setup and ease-of-use is maintained while the design of the advanced video detection processor enables future enhancements.

Features of the Edge 2 include:

- Available in single or dual video input configurations
- Extension modules in 2- or 4-channel configurations
- Uses only one edge card connector for use in 4-channel input files
- Extension modules programmable from processor module, allowing remote programming of extension modules
- Uses delay/extend signals from the input file
- High intensity LED indicators for ease of viewing

Use of Vantage Access and eAccess accessories for a single point user interface or remote access

“A cost-effective machine vision processor module that delivers superior performance in adverse weather conditions.”

Vantage VRACK



Vantage Edge2 video detection products are designed to fit easily and seamlessly into standard detector racks such as NEMA 170 Type 1 input files. For video detection applications that require a separate detector rack system, Iteris offers the VRACK system as a flexible and expandable shelf-

mounted detector rack solution.

The VRACK system can be tailored to meet a variety of module slot configurations. Whether you need a detector rack system for a single camera or for multiple camera configurations, the VRACK system can be inte-

grated easily into your existing traffic signal controller cabinet configuration. VRACK provides an elegant and cost effective video detection solution for intersection control, ramp metering or highway monitoring applications.



Vantage EDGE2 I/O Module

The new Vantage Edge2 I/O Module expands the flexibility of the Edge2 video detection system. With 24 outputs and 8 inputs, the I/O module provides maximum flexibility where additional input and outputs are required for complex applications. The I/O module can drive external logic systems or use inputs from other external systems to expand the capability of Edge2 video detection processor applica-

tions. Logic inputs can now be used even in Caltrans 170/2070 applications. Logic inputs similar to "Delay/Extension Enable" in NEMA cabinets can now be used for those detector racks that do not have the "Delay/Extension Enable" signal.

The module is capable of being installed in either 12 VDC or 24 VDC input files/detector racks. The

system is compatible with NEMA TS-1, TS2, and Caltrans 170/2070 systems. Both inputs and outputs are isolated for maximum system protection. Status indicators are provided for ease of system monitoring. I/O modules can be intermixed with existing 2-channel and 4-channel Edge2 extension modules or with other Edge2 I/O modules.

Vantage RZ4 Color Camera

Vantage® RZ4 Cameras offer the best all-round performance for the detection of vehicles in a variety of lighting and weather conditions. The camera has been optimized to provide a clear and crisp video image that is used as the input to Vantage video detection systems. In contrast to other CCTV type cameras, the Vantage camera delivers a constant and regulated video signal that is easily processed by Vantage video detection systems.

The camera assembly with its integral power supply is housed and sealed in a weather-resistant enclosure specifically designed for out-

door use. To prevent sun glare and to protect the housing from the weather elements, the camera is fitted with a moveable sunshield to allow the camera to be pointed in any direction. The sunshield also extends beyond the front of the camera housing and incorporates an integrated drip rail to protect the housing glass from rain and the formation of icicles that could hinder the view of the camera.

The Vantage RZ4 Cameras have been optimized for use in outdoor conditions specifically for the viewing of traffic flows at the intersection, on the highway, on bridges or

in tunnels. The camera's image is normally adjusted to view up to 4 or 5 lanes of traffic. From this image, the Vantage video detection processor can be configured to detect the presence, motion, speed and classification of vehicles. Other uses for video detection include: Ramp Metering, Pedestrian Detection, Red Light Enforcement as well as Bicycle Detection. It all depends upon where and how you position the Vantage Camera.



Vantage Wireless Camera

The flexibility and ease of use of video detection has just been enhanced! The wireless Vantage™ system offers traffic engineers a new way to implement video detection where installation of cables is not possible or desirable. Ideal for retrofitting older sites with full conduits, temporary detection in construction zones, and advanced detection applications.

Iteris' Wireless Vantage System

utilizes the license-free 2.4 GHz band to transmit live video from the video detection CCTV camera to the controller cabinet. A wireless transmitter has been integrated into the Vantage CCTV camera and has no external components other than a 3-inch linear polarized antenna. The video transmitter is FCC compliant and does not require the end user to have an operator's license from the FCC.

Wireless video detection for construction management activities during road widening, intersection improvements, or temporary lane closures are obvious applications. Other applications that could significantly benefit from the use of wireless Vantage systems are locations where road surfaces are continually being damaged by heavy vehicles or severe weather. At these locations, permanent installations of the wireless system significantly reduce recurring maintenance costs.

“Vehicle Detection without the Cost and Hassle of In-Pavement Detectors.”

Vantage eAccess

This innovative and versatile unit serves as a central point of reference for the Vantage Edge2 processors, I/O Modules and extension modules. Vantage Plus users have long enjoyed the modular integration of the Plus units all-in-one chassis design. Vantage eAccess now successfully brings that same integration and convenience to the Vantage Edge2 product line. Vantage eAccess serves as an intelligent

central hub for Vantage Edge2 processors and accessories. This means that the user simply plugs the mouse, monitor, and up to four expansion modules into the Vantage eAccess unit, and can then switch to any of the peripheral processors without the need of switching any monitor, communication, or pointing device connections. Vantage eAccess is designed to accept USB compatible mice or trackball type

pointing devices. Vantage eAccess is also equipped with a built-in Ethernet controller making it the perfect companion for integration with Vantage Remote Software (VRAS). Features, functionality, and the same "ease-of-use" legacy that you have come to expect from your Vantage products makes Vantage eAccess a welcome addition to your Vantage Edge2 lineup.



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NEW DETECTION CAMERA TO **ITERIS FAMILY**



Introducing a new concept in Vantage video detection, VersiCam is an integrated machine vision processor and camera solution. Designed for small or semi-actuated intersections, VersiCam offers the same high performance Vantage video detection in a low-cost package.

VersiCam is a versatile, high resolution video traffic camera specially optimized for machine vision processor technology. The camera offers remote zoom and focus functions to simplify setup and includes a high sensitivity color imager (CCD) to ensure accurate vehicle detection in all lighting conditions.

The Iteris VersiCam is a complete video vehicle detection solution that is a cost effective replacement to inductive loops and other sensor technologies for many smaller intersections. Other applications include advance detection, highway, ramp metering, and construction-work zones.

“Western Systems offers our customers the unique opportunity to purchase complete traffic and communication network solutions. Western Systems is a valuable source for your traffic needs.”



Vantage™
Easy-To-Use, Accurate, Affordable
Video Detection

Vantage Video Detection

Vehicle Detection Without the Cost and Hassle of In-Pavement Detectors

In a world where traffic responsive signal operation depends on vehicle detection, the Vantage™ video detection product family from Iteris delivers accurate, dependable, vehicle detection with nothing embedded in the roadway. Imagine — a vehicle detector that works day or night, rain or shine, using only video and Digital Signal Processing (DSP) technology. That can be installed without closing lanes, and can be moved without additional cost. And, that works during construction when trenching causes detectors embedded in the pavement to fail. Best of all, Vantage costs less than embedded detectors, and is easy to use, reducing installation and training time and expense. That's the Vantage Advantage!

Easy to Install

Vantage processors mount in the traffic control cabinet and a cable connects outputs to the controller. Cameras are mounted on street lighting mast arms or poles. Video and power cables

are run from the cabinet to each camera. The Processor connects directly to coax cabling from each camera, or can now receive the video signal through our wireless system. Isolation amplification is included in the Vantage Plus™ Processor, eliminating the need to buy extra equipment to protect against transients or compensate for coax cable losses.

Easy to Use

The processors include full programming capability, eliminating the need for a separate PC. A programming menu is displayed as an overlay on the video image from each Vantage camera. Detectors are drawn on the camera video image using a mouse and the video menu.

Dynamic Zone Reconfiguration™

DZR™ allows the modification of one zone at a time without affecting existing detection zones. Once vehicle detectors are saved in memory the detection starts immediately. Best of all, Vantage is so simple to use that basic training can be done in less than an hour