

Corporate Bulletin

New visual sensor system for improved counting of vehicles in parking lot management and traffic-flow monitoring.

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The new Setrix S-3700-O is an embedded real-time video system, with an integrated VGA CMOS image sensor and RISC processor, that performs reliable around the clock counting of vehicles both indoors and outdoors, on roads and in parking lots.

The S-3700-O has been developed using new and innovative sensor technology to enable operators of indoor and outdoor parking lots to carry out their work with greater efficiency and to provide better service to their customers. Car drivers are informed of, and directed to, available parking spaces in the areas, or on the various levels, of outdoor and indoor lots.

The system is in daily use, and interfaces with display panels and PC-based control systems to deliver the availability information to users. In one instance, a network of fifteen camera sensors has been deployed to monitor a 2,300-car outdoor parking lot, spread over one square kilometer, with traffic of 10,000 cars entering or leaving per 24-hour period. In another instance, a network of seven camera sensors monitors an indoor 500-car parking garage.

Traditionally, a technology with induction coils, ultrasound sensors, or light beams is used to count vehicles. But these proven methods have their limitations. The advantages of visual-sensor technology are easy installation, long operational life and applicability in scenarios where these other technologies cannot be used. The S-3700-O is an economic alternative to monitoring individual parking spaces.

As a result of the modern system architecture it uses, the S-3700-O provides greater flexibility for programming, diagnosis, and communication, and supplies more intelligence for counting vehicles and vehicle classes. The camera sensor adapts to a wide variety of different light conditions (sun, clouds, snow, rain, dusk, dawn), and properly discriminates cars from motorcycles, bicycles, pedestrians, shopping and luggage carts. The S-3700-O includes numerous self-check and notification functions allowing for easier operation and maintenance. For example, personal can be notified via e-mail or SMS if a camera sensor is blocked for an extended period of time e.g. by a parked tractor-trailer or taxi.

The Setrix S-3700-O measures 20x12x10 cm, consists of a VGA CMOS sensor, an embedded micro-computer, running the Linux operating system, and application software which processes video at a rate of 30 images per second. The S-3700-O supports multiple bus and LAN protocols, allowing to network multiple sensors, interface with display panels and control-systems, so as to provide a turn-key solution with little or no integration effort. The S-3700-O also supports an optional WAN module for wired (ISDN, POTS) or wireless (GSM/GPRS) communication.

Experience gained from current installations of the S-3700-O shows a high degree of counting accuracy, allowing fully automated operation, without ground personnel. The S-3700-O camera sensor opens up new opportunities for parking lot management in commercial, manufacturing and entertainment venues.

The S-3700-O product brochure is available for download at http://setrix.com/service/index_e.html

About Setrix

Setrix AG is a leading technology provider of embedded wireless communication, monitoring and control solutions. Setrix develops unique hardware and software products that are marketed through partners and systems integrators in the fast-growing markets of home automation, machine monitoring and control, energy management, logistics and traffic control systems. Setrix owns patented technologies in video processing, image analysis and barcode reading.

Setrix AG was founded in 1999 through funding from Siemens Venture Capital, and is headquartered in Munich, Germany. Its U.S. subsidiary, Setrix Inc., is based in Princeton, New Jersey.

Additional information is available at <http://www.setrix.com>