



## CRITICAL INFRASTRUCTURE SECURITY WITH LASER SCANNERS

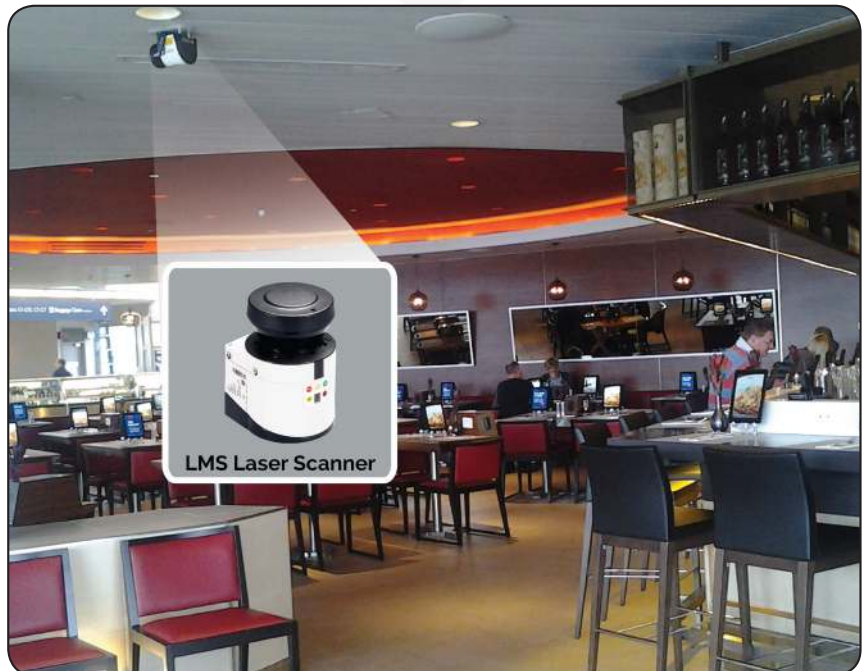
With the continued prevalence of break-ins and theft, along with increased availability of advanced technology, traditional security methods have many times proven to be insufficient. Critical infrastructure such as nuclear power plants and airports are beginning to deploy additional layers of security to augment, or even replace, existing security systems with Time-of-Flight laser scanners.

Laser scanners can be configured to create customized infrared (IR) barriers or follow the contours of a landscape or surroundings. These scanners create an invisible IR barrier and trigger an alarm or a specified event once the IR plane is broken. In addition, the type of alarm that is triggered (for example; silent, audible, direct police alert, or prompt the recording of a nearby camera) can be specifically defined using dry contact relays. What truly sets laser scanners apart from other security methods is that they are highly programmable, extremely accurate, and well suited to be used in harsh environments and inclement weather.

To account for inclement weather, multi-echo technology allows for the laser scanners to accurately detect targets in heavy rain, fog, sleet, or even snow. Nuclear power plants are now deploying laser scanners as part of their security efforts due to their accuracy and filtering capabilities. In harsh weather at a specific US nuclear site, the LMS laser scanner provided by Comtrol was the only sensor that did not fail or go into an alarm state during a heavy snowfall.

Another unique application for laser scanners is within national and international airports, where they are being deployed to protect restaurants or shops within the concourse after closing. The laser scanners are used to replace metal gates which are not only aesthetically unappealing, but are also very costly to install and maintain. The **LMS1XX**, and **TiM3XX** laser scanners create an invisible IR barrier at the entrance of restaurants to restrict unauthorized after-hours access to valuable goods.

Several different models for both indoor and outdoor rated applications of the LMS and TiM laser scanners are available for your security needs at [www.comtrol.com/laserscanners](http://www.comtrol.com/laserscanners).



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# SECURITY LASER TECHNOLOGY

Laser scanners are very well suited for providing additional levels of security in areas that are deemed critical and/or requiring Critical Facility Anti-Terrorism Standards (CFATS) such as:

- Chemical facilities
- Food processing facilities
- Water treatment facilities
- Nuclear power plants
- Power substations

The scanners can be employed wherever large areas require complete protection against unauthorized access or entry.



## AT A GLANCE

### LMS173



- Small, light and economical measurement system
- Cost-effective retrofitting due to low installation and wiring costs
- Secure due to high angle resolution allowing the system to create a finely “woven” security veil
- Small size for “invisible” installation
- High availability at a low false alarm rate by precise field configuration of the detection area
- Highest level of detection reliability, also on black apparel

### LMS182



- Small, light and economical measurement system
- Real-time output of measurement data via Ethernet interface
- Number of switching outputs can be expanded via external CAN module
- Parameterisation interface accessible from the front while device mounted
- Rugged housing
- Field evaluation using intelligent algorithms

### LMS581 (outdoor)



- Powerful and efficient laser measurement sensor for measurement ranges of up to 65 m
- Outstanding performance in adverse environmental conditions due to 5-echo technology
- IP 67, built-in heater, highly compact design
- Low power consumption
- Fast signal processing
- Multiple I/Os
- Synchronization of multiple sensors possible

### TiM351 (outdoor)



- 7.9 cm height
- Low power consumption
- Robust, industrial design
- High Definition Distance Monitoring (HDDM) technology
- “Touch and Teach” function for setup without a PC
- 48 available fields; in rectangular, radial or free-form shapes



For questions, please contact Mark Pikkarainen at 763.957.6137 or [mark.pikkarainen@comtrol.com](mailto:mark.pikkarainen@comtrol.com).

#### Warranty Information

Control offers a 30-day satisfaction guarantee and 5-year limited warranty.

#### Sales Support

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