

## VIVOTEK Network Cameras Provide Advanced People-Counting Technology for the National Library of Latvia

### National Library of Latvia: A National Cultural Institution Known for Its Popular Exhibitions

Located in the capital city Riga, the National Library of Latvia attracts visitors that range from residents needing traditional library services to cultural enthusiasts viewing the library's countless exhibitions. Featuring permanent, temporary, and even virtual exhibitions, an exhaustive amount of print and digital library resources, and serving as a center for research and lifelong education, the National Library of Latvia is an important national cultural institution that has received recognition from UNESCO.

### The Challenge: A Diverse Range of Resources Leads to Visitor Number Growth and Increased Surveillance Needs



A monument to tradition and modernity, the library is unique in that it offers both historical documents and modern services, such as Internet access and interlibrary loans. Established in 1919 and having survived occupation by both Nazi Germany and the Soviet Union, the library's eight buildings are home to over five million titles, more than 18,000 manuscripts dating from the 14th Century to modern times, and a highly valuable collection of national literature. Furthermore, at any one time the library is host to around 20 exhibitions that bring in innumerable visitors. It is these diverse services offered by the Library that explain why so many people go through its doors every day.

### The Solution: VIVOTEK Teams Up with NVision to Install People-Counting Camera Surveillance System

**Vertical:** Government

**Country:** Latvia

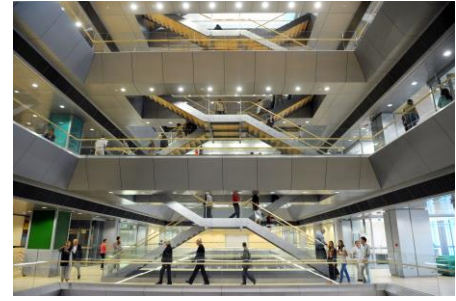
**Solutions:** FD8166A-S/  
SC8131

**Software:** VAST

**Total Quantity:** 5

**Partners:** NVision Ltd.

The large crowds, while an endorsement of the Library and its facilities, are a daunting challenge for surveillance staff, especially when added to by the library's nearly 500 employees. VIVOTEK's FD8166A-S and SC8131 cameras make facility management much smoother by offering



state-of-the-art people-counting technology to provide an omniscient view of all those within the Library. Security and surveillance are an absolute necessity for an institution as physically immense and culturally important as the National Library of Latvia, and these two cameras abundantly satisfy both factors by providing clear video streams and accurate estimates for visitor counts.

A technology-minded company specializing in CCTV cameras and security systems, NVision teamed up with VIVOTEK to install two SC8131 cameras and three FD8166A-S cameras at the entrance of the National Library of Latvia in December 2016. With its five new cameras, the National Library of Latvia is now fully capable of controlling crowds and providing safety for both visitors, staff, and the valuable archives and technology stored inside the building.

### **VIVOTEK Surveillance Cameras Simplify Facility Management by Offering State-of-the-Art Capabilities**

VIVOTEK's FD8166A-S and SC8131 cameras provide staff with real time data on the Library's visitor count, helping them to customize both exhibition spaces and library resource areas according to changing crowd sizes. Intelligent and centralized control over the cameras through [VAST](#) ensures that miscommunication and other issues connected to facility management will be a thing of the past. Further enhancing the operability and effectiveness of the system, the cameras allow staff to choose specific places to view, making it much easier to see both the current location of crowds and to know where they are heading next.

The National Library of Latvia's visitor count is constantly changing due to factors such as the opening of new exhibitions, the time of the year, day of the week, and whether it is morning or afternoon. As a result, the unpredictability of visitor counts makes managing the library's crowds a complex

challenge. VIVOTEK's FD8166A-S and SC8131 cameras ensure that staffs are constantly abreast of changes in visitor demographics by providing cutting edge people-counting technology and elite surveillance capabilities.

### **Staff Can Promptly Adjust Library Spaces Due to Cameras That Provide Accurate Visitor Count Information in Real Time**

With so many buildings, resources, and visitors to manage, the National Library of Latvia needs to be proficient in dealing with big crowds and the unpredictable nature of visitor counts, which range from small to large depending on factors such as the time of the day and an exhibition's popularity. Fortunately, the library has five FD8166A-S and SC8131 cameras that allow staffs to know where visitors are and where they will be walking to. VIVOTEK's FD8166A-S and SC8131 cameras are centrally managed by VIVOTEK's VAST, which, coupled with the cameras' easy to operate and highly effective people-counting technology, ensure staff know exactly where visitors are in real time.

The FD8166A-S ultra-mini fixed dome network camera is easy to install, possesses excellent night visibility, a defog mechanism, stylish design, and is WDR enhanced. Despite only having a 90mm diameter, the camera offers audio and four video streams with a viewing resolution of 1920x1080 at 30 fps. Even more impressive is that the video streams provide high-definition images regardless of whether a room is well or poorly lit. Users also benefit from the camera's Smart Stream II technology, which significantly reduces bandwidth and storage consumption without sacrificing image quality.



In addition to people-counting and flow tracking capabilities, the SC8131 stereo network camera boasts 3D depth technology, incredible 98% accuracy, and bi-directionality. Placed above a building's entrance, this camera's sophisticated technology enables it to distinguish between humans and non-human objects. This camera can be integrated with video content analysis that provides metadata in the forms of graphs and line charts. Together these capabilities prove extremely valuable in





efforts to improve a building's layout and when planning staff deployment.

These two camera types are connected to VAST, VIVOTEK's video/central management software (CMS) that allows users to effortlessly operate all of VIVOTEK's surveillance products. With VAST, security staff can monitor live video streams for hundreds of cameras, with system providing recording, playback and event trigger management functions.

The FD8166A-S and SC8131 cameras and VAST complement one another to ensure that the National Library of Latvia improves its crowd management both daily and in the long-term. Most importantly, these five new cameras make sure that this national cultural institution is safe and orderly for its users, its staff, and the people and culture of Latvia. Most remarkably, despite the huge scale of the Library, with the deployment of only five VIVOTEK network cameras, the entire space is now able to be monitored effectively, and managed intelligently.