

## The Mall at Short Hills, USA



# 1.3-Million-Square-Foot Mall Secured by MOBOTIX IP Video Systems

The Mall at Short Hills is an upscale shopping center in Short Hills, N.J., that features more than 160 specialty stores, including Neiman Marcus, Nordstrom and Bloomingdale's. The 1.3-million-square-foot mall was built in the early 1960s and was transformed from an open-air shopping center into an enclosed structure in 1980.

### The Surveillance Need

Taubman Corporate, the company that manages The Mall at Short Hills, recognized a need for a cohesive, networked security system throughout the sprawling facility to better protect customers, tenants and employees, while safeguarding the mall itself from vandalism and crime. The development company also sought a system that would provide high-quality video to serve as evidence of incidents, whether criminal and liability related.

With an influx in active shooter incidents at New Jersey-area malls, security is of utmost importance. The Mall at Short Hills previously had an analog DVR-based video security system in place, but it was quickly reaching end-of-life. Management

agreed to upgrade to a state-of-the-art digital video surveillance solution that would provide full coverage of critical areas, remote access to video and advanced intelligence.

### A Technology Overhaul

The Mall at Short Hills partnered with systems integrator MTS Intelligent Surveillance Solutions to update its surveillance network. MTS designed the system with dedicated network architecture. "The mall was looking to create a new IP video surveillance solution to provide 100-percent coverage of critical areas," said Rob Merchant, MTS. "We designed a digital video surveillance solution based on an open platform to allow it to scale as needed."

The video system leverages MOBOTIX IP video surveillance solutions, Pivot3 network-attached storage for long-term recording, and robust systems management tools to provide new levels of flexibility. Both analog and IP cameras are supported, allowing the mall to transition to an IP system over time while leveraging networked cameras in high-traffic areas.

Nearly 75 MOBOTIX DualDome D15 megapixel cameras provide day and night surveillance capabilities as well as the flexibility for operators to pan, tilt and zoom to specific areas when needed. DualDome cameras feature two lenses for 360-degree surveillance, and The Mall at Short Hills has benefited from this feature because the lenses are designed to operate independently. Since each lens acts as a separate camera, the overall camera count was greatly reduced, not only helping maintain the aesthetic appeal of the mall, but resulting in significant cost savings. Better yet, each camera required only one wire run, which reduced wiring costs by 50 percent.

After the initial phase of the project was complete, the mall experienced an incident in which an individual was carjacked and murdered. Police were able to rapidly solve the case with the high-resolution camera footage, but the event prompted further upgrades. Now, MTS is installing 15 D15s in the parking areas as a proactive response to increase security and awareness at the mall. The system's expansion also was driven by a need to protect from fraudulent slips and falls.



## Full Coverage In High Resolution

When it comes to storing the video, MOBOTIX cameras provide a distinct advantage. Mall security officials can reduce the frame rate if needed but store the higher-resolution video on the camera. "This is always an advantage with MOBOTIX," Merchant said.

Merchant and his team also are installing a wireless network, which will serve as complimentary Wi-Fi for shoppers. The network also will be used to increase the mobility of its security team. Mall security will be able to patrol with tablets and see live camera views. In addition, The Mall at Short Hills is installing outdoor directional Wi-Fi to help mall management, police and first responders in the event they need to locate someone during a situation. Local police also will have access to the mall's cameras to realize enhanced situational awareness in the event of a crime. From anywhere on the property, officials will be able to tap into a very high-speed link to the command center.

The mall leverages MxControlCenter, an easy-to-use video management software package provided by MOBOTIX free of charge. It allows designated users to tap into valuable management features such as simple configuration and installation, a layout editor for floor plans, and a user-friendly interface and camera view. MxControlCenter ensures secure access to video footage, only allowing authorized users to access the surveillance network based on pre-assigned access privileges.

Pivot3 vSTAC appliances capture video images and host the video management software through the use of virtualization. The scale-out nature of the Pivot3 solution ensures that the performance and capacity of the system can handle the demands of incoming video streams and offer investment protection over time as the deployment grows.

At Short Hills, Pivot3 appliances offer up to 96 TB of storage, fully managed through an SNMP platform. On a typical day, more than 2 TB of video is written to disk. But as the needs and risk profile of a mall evolves, the Pivot3 scale-out system has the flexibility to add capacity and performance without disruption simply by adding appliances over time.

### Looking to the Future

It was important to mall officials that the new system is able to grow and adapt as The Mall at Short Hills changes over the years. MTS specifically designed the system so that management can scale the number of cameras, as well as camera locations, storage and capability, as needed. Now, the mall can grow its system and continue to upgrade technology over time.

Since the management company operates 27 different properties, and has nine in development, the company wanted the surveillance system



at The Mall at Short Hills to become a model for its other mall facilities. MTS took this goal into consideration during the design phase; now, the system will be replicated at other locations to provide the same level of security and protection that it does at Short Hills.

The mall continuously deploys new systems to improve the quality of its video surveillance footage. In particular, the D15 has improved frame rate. “It’s been a constant investment on the center’s part,” Merchant said. “And the facility plans to continue to enhance the system to ensure the highest level of security for years to come.”



MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.






MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.





MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.





The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.





The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.


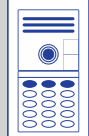


An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Outdoor Dual Lens			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust for extreme conditions	Flexible dual camera	Modular dual camera	Thermal dual	Thermal dual

Outdoor Single Lens			
M25/26 Allround	S15M/26 FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular Fix dome

Indoor			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° hemispheric	Discreet, video analysis	Modular ceiling camera	Vandalism camera

Door Modules			MxDisplay+
Camera	BellRFID	Keypad	Remote Station
			

Door Sets			
Double Frame		Triple Frame	
			

Retailer information: