

CASE STUDY: LigoDLB 5-15n

Elevator Surveillance | Tbilisi, Georgia





Context

M2 Real Estate, the biggest real estate developer in Georgia, have recently built a business center with office spaces and residential units. It is located in Vake, a green and elegant neighborhood in South-West Tbilisi, Georgia.







Problem

The complex needed adequate on-premises security, keeping in mind the local standards for security and the fact that Vake is a prestigious area. This included video surveillance in passenger and car elevators, which posed several challenges:

- Elevator shafts had no video data transfer infrastructure, so it had to be planned and installed from scratch.
- The solution had to support smooth surveillance video streaming at 1080p/30FPS without lag or delay.
- The shaft gave little free space and was hard to reach, requiring compact and easily accessible infrastructure.
- To minimize elevator downtime during setup and maintenance, the infrastructure also had to be easy to install.
- Lastly, the equipment had to be resistant to lightning in case of failure in the building's lightning protection.

Solution

GLM Group, a security solutions provider and LigoWave's distributor in Georgia, was hired to plan and install the video surveillance network in the elevator shafts.

GLM chose LigoDLB 5-15n wireless PTP devices as they best fit the client's requirements and scenario: it is small, simple to deploy, and supports dynamic links.





Results

Going wireless was not only an easy and fast solution to setting up the needed video transfer infrastructure, but also got rid of impracticalities like installing and maintaining wires.

Since the 5-15n is one of the smallest CPE in the industry, GLM had no problem fitting it into the elevator shaft: one to the top of the shaft and the other to the top of the elevator car.

Moreover, DLB's built-in OS and the Infinity Controller allowed for remote upkeep and monitoring straight from the surveillance room, meaning that there was now no need to stop the elevator and to climb into the shaft every time for maintenance.

DLB is also one of very few wireless solutions that offer integrated surge protection (2kV line-to-line

and 4kV line-to-ground)—a feature that other vendors do not have or offer a limited version.

Lastly, video surveillance networks require powerful and reliable solutions (more so with elevator surveillance), so a key factor for choosing the 5-15n was its hardware platform and features. Besides the 170+Mbps data transfer speed, it automatically adjusts the transmit power (ATPC) whenever the elevator moves up or down, ensuring a stable wireless link. The iPoll proprietary protocol stabilizes jitter and reduces latency, making sure the video stream is without interruptions or delay. As a result, there were no problems running the surveillance video stream in full HD quality at 30FPS once the network was set up.



Conclusion

Video surveillance is a crucial tool for preventing crime and keeping the premises safe. LigoWave provided a wireless solution that not only helped the client guarantee a high level of security on the premises, but one that also allowed them to reduce setup time and maintenance costs without compromise to performance.