

## Summary

# Executive summary

Connected video cameras can be useful in a wide range of applications from surveillance and business optimization to recreational activities. This report focuses primarily on connected video cameras used for surveillance, security and safety applications for consumers and businesses. These types of video cameras help protect people and property such as homes, commercial buildings and industrial sites. The recorded video material can also be used for accountability and as evidence in the criminal justice system or to settle insurance claims. Video footage can be recorded and stored on the device or be streamed to a remote location for storage and viewing. Live video streaming allows for immediate notification and response to incidents. The connectivity technologies used for transferring video footage are mainly Ethernet and Wi-Fi while cellular technologies (3G/4G/5G) is so far used to a smaller extent. This study investigates connected video cameras in the following five application areas: city surveillance; commercial buildings and industrial site surveillance; smart home security cameras; body-worn cameras; and video telematics for commercial vehicles.

The global market for video surveillance systems used in city surveillance applications and for protection of commercial buildings and industrial sites was worth an estimated € 21.9 billion in 2019. This number is forecasted to grow at a CAGR of 12.0 percent to reach € 38.0 billion in 2024. The market value includes networked hardware systems for video surveillance and associated software systems, which are installed in both the public and private sectors. China has grown to become the largest market for video surveillance equipment and is estimated to account for over 40 percent of the global market value. In 2019, the European market for video surveillance equipment was worth € 3.5 billion, accounting for 16 percent of the total global value, while the North American market amounted to € 5.1 billion, representing around 23 percent of the worldwide market. Leading video surveillance vendors include the major Chinese vendors Hikvision and Dahua Technology, Swedish Axis Communications as well as large US and European corporations such as Honeywell, Bosch and Tyco (Johnson Controls).

The market for connected home security cameras is served by primarily two types of actors – home security system providers and standalone security camera manufacturers. Berg Insight estimates that the market value for smart home security cameras in North America and Europe reached € 2.7 billion in 2019. The US market is larger than the European, accounting for close to 80 percent of the total market value in the two regions. The market is mainly driven by vendors of standalone cameras such as Amazon, Google Nest, Arlo Technologies and Wyze Labs. Professional security companies such as ADT and Vivint, as well as DIY home security system vendors such as SimpliSafe and Frontpoint Security experience increasing uptake of security cameras as part of wider home security systems.

Law enforcement is the leading market segment for body-worn cameras (BWC). The use of BWCs in other areas such as private security, construction, logistics, healthcare and retail have so far been rather limited but holds great potential as the total addressable market is large. Berg Insight estimates that the total revenues generated in the BWC market in North America and Europe amounted to € 363 million in 2019. The North American market is larger than the European, accounting for about 70 percent of the total revenues. The market comprises a wide range of manufacturers from different industry sectors, including US-based providers Axon, Digital Ally, Getac Video Solutions, Pro-Vision, Utility Associates, Wolfcom and Motorola solutions. Europe-based providers include Digital Barriers, Pinnacle Response, Reveal Media, SoloProtect, WCCTV and Zepcam.

The video telematics market is served by a number of different types of players, including vendors focused specifically on video telematics solutions for various commercial vehicles, general fleet telematics players and hardware-focused suppliers. Berg Insight ranks Streamax, Lytx and Samsara as the leading video telematics players in their respective categories. Additional key providers in the market include SmartDrive Systems, KeepTruckin, SmartWitness, Nauto, Trimble, SureCam and VisionTrack. The market value of the video telematics market in North America and Europe is estimated to have reached € 725 million in 2019. The North American market accounted for around 80 percent of total revenues. Growing at a CAGR of 15 percent the market for video telematics solutions in North America and Europe is forecasted to reach € 1.5 billion in 2024.