

DHS Science and Technology Directorate

Low Light Internet Protocol Camera

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S&T Partners with ICE to Develop Low Light Camera for First Responders

The U.S. Department of Homeland Security (DHS) Science and Technology Directorate (S&T), along with DHS Immigration and Customs Enforcement (ICE), has partnered with surveillance technology and equipment industry partner Industrial Video & Control (IVC) to develop a camera technology as described by law enforcement subject matter experts in the field. Agencies that perform camera surveillance activities require a camera that is easy to conceal in a variety of locations and one that can provide optimal high-resolution video footage in a variety of lighting conditions, especially in very low light. The camera must operate over internet protocol (IP) in order to transmit data to and from the camera in real time. IP allows the camera to transmit video over the internet to a remote location where law enforcement can discretely monitor the area under surveillance and control the camera from that safe location. The camera must also be capable of operating in a myriad of outdoor environmental conditions and include maximum data storage capacity.

New Technologies and Capabilities Added to High Quality Cameras

While there are many small and easy-to-conceal cameras on the market today, none previously offered the full range of capabilities that undercover surveillance operations require. During normal surveillance operations, law enforcement officers place live feed surveillance cameras in target areas and review footage remotely from personal data applications, laptops and desktop computers. Police officers often require the video capabilities to overcome internet connectivity issues and low light environments, but do not have the appropriate technology. A new camera technology alleviates these challenges identified by experts in the field. The Low Light IP Camera has remote pan, tilt and zoom capabilities to accommodate for a variety of angled shots and movements controlled from a secure internet connection. It also provides data and feedback in real time environments, which the law enforcement community can take advantage of.



Adding Value to Surveillance Abilities

The goal of this technology is to produce video capable of conclusively identifying persons under a variety of conditions, including low light. The capability to have cameras integrated in an IP environment with excellent low light resolution provides law enforcement personnel with more surveillance options and allows them to expand their response options.

Partner Information and Next Steps

S&T's First Responders Group and ICE, along with the Center for Commercialization of Advanced Technology based at San Diego State University, worked with IVC to address the requirements for this technology, as identified by law enforcement subject matter experts with backgrounds in undercover surveillance operations. For more information concerning the Low Light IP Camera, visit the IVC website at <http://www.ivcco.com>.



Homeland Security

Science and Technology

To learn more about the Low Light Internet Protocol Camera, contact S&T First Responders Group at sandtfrg@hq.dhs.gov