PRODUCTS

BENCH TEST The Finer Aspects of Pelco's Sarix 5MP Camera

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Pelco by Schneider Electric has many models and styles of analog and IP cameras in its portfolio. The Sarix line of CCTV cameras represents the majority of the IP product offerings in the Pelco line, and the Professional Series is the brand's upper level. The IBP519-ER IP camera is part of the Professional Series and is designed for specialized applications in a CCTV system.

Sarix IBP519-ER 5MP Camera

Construction

The IBP519-ER is described as a "bullet camera" in Pelco's literature; perhaps "cannonball camera" would be more appropriate, considering the size of the unit. At 4½ inches in diameter, 10½ inches in length and almost four pounds in weight, it is far from small and unobtrusive. In fact, it is roughly three to four times the size of a "typical" bullet camera. That being said, the IBP519-ER has a very solid feel to its die-cast aluminum case design. The case and components are well-designed and have a nice fit and finish to all of the camera's parts. The camera has an integrated sunshield that can be pulled forward to provide protection from the sun, rain and snow. The integrated mounting base allows the camera assembly to be swiveled in varying positions to provide a level viewing image even when the mounting surface isn't. While I usually prefer a dome-style camera (the IBP519-ER's design allows the field of view to be easily determined by ne'er-do-wells) I can see its place in the CCTV world.

The camera has an IP66 rating for water/dust intrusion and an IK10 rating for impact resistance. The case is completely sealed since there isn't any need for a technician to gain access to the camera assembly itself. The camera has an approximately 8-inch umbilical cord that protrudes from the mounting base; this has all of the physical connections for the camera. In order to maintain the camera's protection ratings the IBP519-ER must be mounted utilizing one of its environmental bases or back-boxes to provide these connections protection from the elements.

There is a small "trap door" on the base of the camera assembly that provides access to the internal RJ45 connector, the micro SD card slot, the default and reset buttons for the camera. The door also has an integrated ¼-20 threaded mounting hole if the included mounting base is not utilized. We would be very leery of using this mounting option given the size and weight of the camera assembly.

Features

The IBP519-ER has a 5-megapixel (MP) imager that is mated to a 3mm to 9mm power zoom lens. As the unit is completely sealed, Pelco has incorporated an auto-focus function to provide the best usable image from the camera. As with most IP cameras the IBP5129-ER has the capacity for one hardwired alarm input and one hardwired contact output to trigger a device as necessary. According to the camera's literature, the unit has the ability for bidirectional audio but our review unit only had a line-in audio terminal block. There was another terminal block that was labeled N/A; it is possible this feature may be available in the future but my test model didn't have the capability for an audio output.

The IBP519-ER is equipped with a mechanical cut IR filter and also has 48 LED IRs to provide plenty of illumination in low light and nighttime conditions. The camera is also equipped with a micro SD slot that can accept up to a 32GB card to allow for edge video storage in the camera for retrieval at a later time in case there are any network interruptions. The IBP519-ER is also equipped with motion detection and notification of sabotage capabilities, the latter of which can be useful where the camera is installed in vandal-prone areas.

Setup

When testing other Pelco network cameras I have had to load proprietary software in order to access the cameras for setup and testing. Regular Bench Test readers know this forced use of additional software has always been a bone of contention with me. Reading the supplied installation manual for the IBP519-ER I was pleasantly surprised to discover I could directly access the camera from a preset IP address via my Web browser. I did need to load a Pelco video driver from the supplied CD to view a better video stream than the embedded QuickTime viewer provided; this is something I can live with. Once into the camera's menu it was very easy to navigate through the various tabs and camera settings. The camera is factory preset to provide dual video streams, with the primary video stream set for 5MP and the secondary video stream set for just under 0.5MP. Both of the video streams are set to deliver 12 images per second (IPS), which will provide an adequate frame rate. We

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Pelco Sarix IBP519-ER 5MP Camera

SPECS
◆ Ruggedized, fully sealed IP 5MP camera
◆ IP66 rated

PROS
◆ Solid construction
◆ Power zoom
◆ Articulating mounting base for camera adjustment
◆ IR illumination

CONS
◆ Fixed body design gives away the camera's field of view
◆ Best for "specialized" applications

A small trap door on the assembly base provides access to the camera connection, micro SD card slot and setup buttons.

generally specify a minimum of 15IPS when we are designing a CCTV system for our clients, so the factory settings of the IBP519-ER are close to our parameters.

Setting up the camera with a static IP was easy and the unit is preset to utilize the standard communication ports that most every IP camera uses these days. Turning features on and off requires the operator to save the actions, and the camera will perform a "mini-reboot" to save the changes but the unit is quick to return to online status.

Testing

I set up the IBP519-ER in an outdoor environment for testing the video streams and the camera functions. It's a good thing the camera has a -40° C to 50° C rating because the night I tested the unit it was 10° F with howling winds. I utilized the camera's PoE connection as I wanted to see if the unit could muster through without the use of 24VAC to bolster its performance. The camera performed very well in the harsh environment and I did not notice any degradation of the video quality due to the inclement weather. My overall field of view was a low light environment and the integrated IRs helped considerably with providing effective viewing during the night. I set the camera up to view an area approximately 150 feet from my mounting location and the IBP519-ER provided a good overall image.

As part of my testing I adjusted the camera's video settings to see how the image would change from 5MP to 3MP and lower. In the 5MP and 3MP mode the IBP519-ER provided a very clear 4:3 aspect ratio video image; the 2MP mode provided a nice 16:9 image that, for my test viewing, was more suited for an overall "surveillance" environment.

The camera's power zoom is a nice feature that allowed me to close in on my preset area and get a better view on the surroundings. Later during my testing more snow started coming down so I had to turn off the IR illuminators since all I could see was white stuff swirling around in front of the camera. Even without the IR illuminators the IBP519-ER provided a usable image at night.

Conclusions

The IBP519-ER is a solid camera for the money. It would serve you well for those applications where a heavy-duty camera is warranted to fill a specialized need.

VERDICT
FEATURES ① ② ③ ❹ ⑤
CONSTRUCTION ① ② ③ ④ ❺
SETUP ① ② ③ ❹ ⑤
PERFORMANCE ① ② ③ ④ ❺
OVERALL ① ② ③ ❹ ⑤