

4K Video Surveillance Cameras. Are They Right For Me?

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4K surveillance is the latest offering in the world of HD video surveillance cameras. The 4K label on a camera means that the device will record images at a level of about 12 megapixels or video at double the resolution of a standard HD TV (1920 x 1080). While that may not seem like much (after all an iPhone 6 comes with 8 megapixels of resolution), when you compare the image or video from 4K to non-HD surveillance technology, you will immediately and intuitively understand that the increased resolution can be the difference between guessing and certainty when analyzing footage. For example, the image above shows the difference between a 3MP, a 5MP, and a 12MP (4K) camera when they are all digitally zoomed. As you can see, the clarity of the 4K image is much better.



Prices on 4K cameras are now very affordable and available from a wide range of manufacturers.

What are the tradeoffs?

There are some tradeoffs when implementing higher resolution cameras. Two of the biggest include the amount of lighting needed to provide a quality image at night, and the amount of storage needed to store the video footage. In general, the higher the resolution of the camera, the more lighting you need to maintain a useable image in low-light conditions. Manufacturers of 4K technology have made a lot of progress in designing these cameras to work in low-light conditions, and many models now have built-in infrared illumination (IR), allowing the cameras to produce a high-quality image in zero-light applications. This IR light is limited in the distance it can illuminate when built into the camera. If distances exceed 75 to 100 feet, external IR illuminators may be required to provide distances beyond 100 feet.

In addition to lighting, another important factor is the amount of video storage needed to record a 4K image. In most cases this breaks down to dollars and cents. You will pay more for 30 days of storage for a 4K versus a 3MP – possibly as much as three times the amount. That said, the newest compression technology (H.265) is 30% to 40% more efficient and can save the consumer a substantial amount of money when compared to the previous standard H.264. It is important to note that not all manufacturers support H.265 technology at this time. This is something that should be discussed and considered when choosing the make and model of system(s) you are evaluating.



A new generation of video surveillance cameras with ultra high definition is now available.

In the end, 4K technology is here to stay. Prices on these cameras are now very affordable and available from a wide range of manufacturers. Chances are, your facility can benefit from this latest technology. Give us a call for a hands on demonstration.

For more information call 800-900-4564 or email us at jmgsecurity.com