

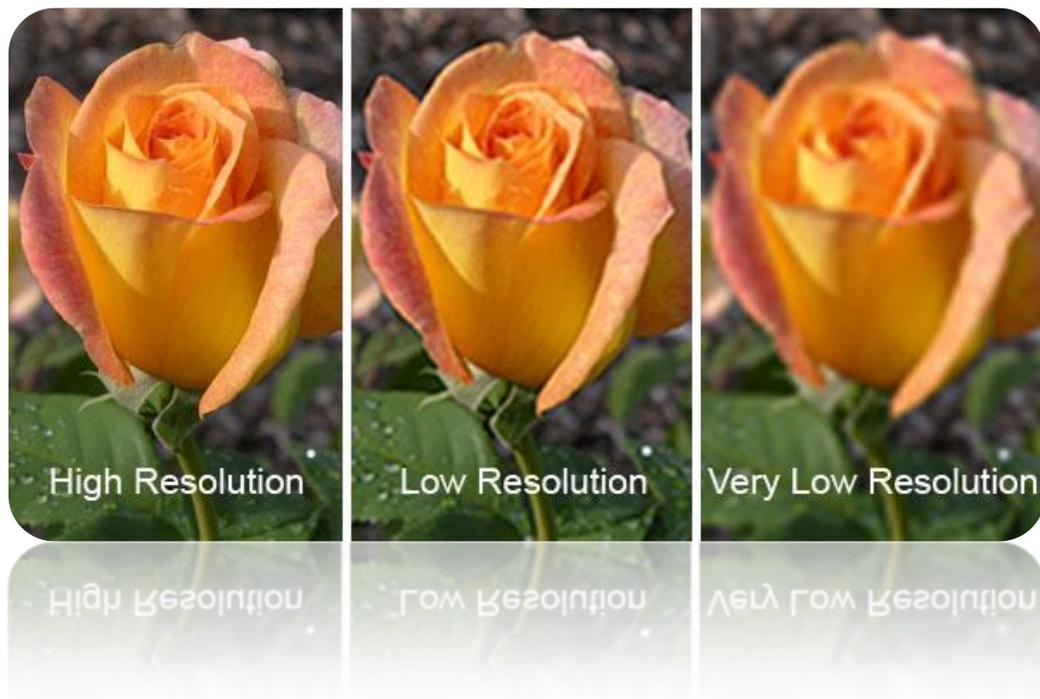
## Surveillance and Security Camera Buyer's Guide

Today's security cameras and systems are smaller, less expensive, more sophisticated, and packed full of features. This is great for the consumer as you have more far more options at your fingertips than ever before!

Be very careful thou, the Chinese market is enormous and the quality is not consistent. Inferior products are quite often passed on by manufactures to trading companies to sell online with eBay and other outlets.

At [aussiesurveillance.com.au](http://aussiesurveillance.com.au) we have put together these quick tips to help you with selecting the right camera for the job

### Resolution



The resolution of a camera basically determines the quality of an image or footage, the higher the TV lines, the higher the resolution. (See - Image Quality)

By today's standards 700 line plus is a good start in analogue cameras.

Most cameras look similar when viewing real-time film, but lines can become obvious when digitally zooming to extract more detail. And remember, the quality of your cameras footage will depend on the quality of your DVR's.



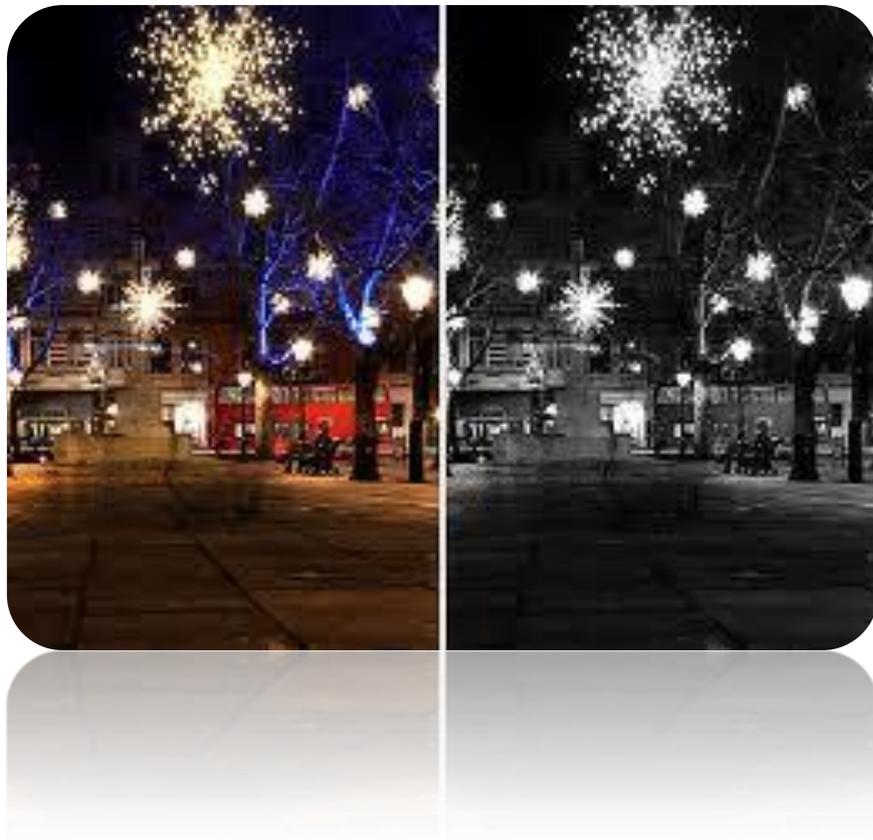
## Environment

Is the camera indoors or outdoors?

Cameras rated with an IP66 rating or above are weather proof and can be used outdoors

**Please note: Weather Proof means Water Resistant and not Water Proof!**

## Colour / Back & White



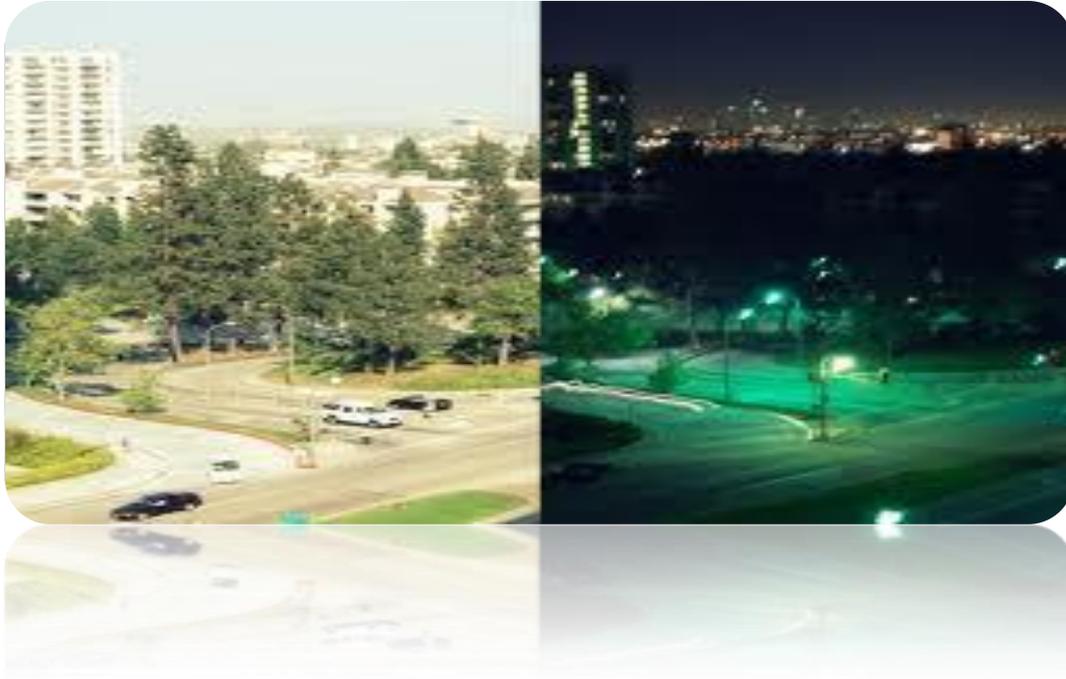
### Colour VS Black & White Security Cameras

Colour cameras are the preferred choice for most security systems. However, black and white cameras are slightly cheaper, more sensitive to light, and can see better in darkness.

Infrared (IR) security cameras switch to black and white mode during low light conditions to improve their night vision and return to colour in good light conditions.

IR cameras have gained popularity because of their flexibility and have become the standard type of camera installed in systems today.

## Lighting conditions



This is important: IR or array cameras offer an alternative for very little or no light situations. But be aware that night viewing will not be in colour and the image is not perfect, missing vital information such as facial features and the colour of clothing or cars

If these cameras are used and too much light is present then the camera will remain in day mode. When this occurs the images can be extremely poor, using a good quality Day/Night camera is a much better alternative. Our magic camera range that operate with extremely low light



Variable focus Long range  
Infra-red camera with concealed  
cable covers for added security.  
This camera can provide high  
quality day and night images with  
Vary focus and automatic picture  
adjustment

AS-960VF 9 - Available at [aussiesurveillance.com.au](http://aussiesurveillance.com.au)

## Camera Location



Note: Cameras mounted too high can offer only a top view of subjects and cameras mounted too low can capture a distorted 'looking up at' image. Cameras placed too low also are more vulnerable to vandalism.

Vandal proof cameras or multiple cameras in different locations can deter offenders.

Getting the best out of any camera is just like taking a photo (have the light behind you) where possible, this prevents shadowing in essential areas such as faces

Back light compensation (BLC) is used to rectify incorrect lighting locations by effectively brightening shadowed areas or darkening bright areas

The best example is a camera used to view people entering a shop. If the camera is pointing from inside to outside and the light source is greater outside then the result can be disappointing. BLC can be used to solve this problem and help you understand basic camera specifications and their effect on the performance of the camera.

## Pan/Tilt/Zoom



No Zoom



5x Zoom



Digital Zoom

Zoom has always been available with analogue cameras, but with Pan/tilt/zoom cameras, you can zoom, pan, and tilt on live footage!

## Auto Iris vs. Manual Iris

**Auto iris lenses** are a fantastic choice for outdoor surveillance where light is constantly changing. The iris for these lenses automatically opens and closes according to the amount of ambient light so that your video feeds are not affected by the change in lighting conditions.

**Manual iris lenses** are well suited for areas with consistent lighting like shopping centres, schools, libraries, and offices because the iris only needs to be set once during the installation of the lens. Manual lenses are less expensive than their auto counterpart since they do not come with the auto-adjust mechanics, but are more limited because of that distinction.

## Image Quality

Analogue camera resolution or picture quality is measured by the number of horizontal lines the sensor chip in the camera provides and is called "TV lines of resolution" or TVL

- **Standard Image Quality:** 380TVL - 420TVL.
- **High Image Quality:** 480TVL - 520 TVL
- **Very high Image Quality:** 540TVL - 700TVL

Infrared LEDs allow security cameras to see in dark areas by flooding the area with infrared light. This light reflects off surfaces in the area and is picked up by the camera's sensor chip which allows the camera to see as if the area was lit by visible light.

- **Number of LEDs:** The more LEDs, the better a camera can see in low light environments.
- **Illumination Range:** Refers to the maximum distance at which an object is visible at night.

Vandal resistance is in reference to whether or not a camera is reinforced with a hardened plastic or metal housing so that it is more ruggedly built. If a thief or burglar wants to get on



your property bad enough, they will try to damage or break your cameras so they are not seen.

## Wired VS Wireless Cameras

Wired security cameras are the best choice since they provide the highest video quality, no interference, and are less expensive than wireless networks. They can be installed hundreds of feet away from the security DVR system without any drop in performance.

Wireless cameras are also susceptible to scanning, interference and have security issues.

### Lens size



Variable focus, DC,  
Auto Iris lens with a focus range  
2.8mm-12mm with CS Mount.

**AS-LENSV2.8-12 Available at [aussiesurveillance.com.au](http://aussiesurveillance.com.au)**

Don't think about this too much as the CCTV industry have done most of the work for you

Basically there are two types of lenses

#### **Fixed lens:**

Less expensive, pre focused and not adjustable: Easy to setup (just point) commonly they are a very wide view and do not offer as much prudential image quality

#### **Variable focus:**

(A little more expensive) they allow you to optically zoom in closer to the subject, offering better image quality without Digital enhancing or zooming



## Points to remember

- Work out what your budget is and stick to it.
- It's better to have one good camera than many poor quality cameras
- The price of a standard CCTV camera ranges from \$40 to \$1600
- The important parts of a camera are the Chipset and the Lens
- Housings for cameras are often mass produced and assembled in China
- Look for Sony or Sharp Chipset and glass lenses
- Steer clear from buying overseas from eBay and online stores
- Most importantly - seek good advice

## Questions to ask yourself

What type of security system do I need?	Home	Office / Warehouse	Remote
What kind of Cameras will do the job?	Colour	Black and White	Both
How big an area do I want covered by the cameras	Home(s) / property(s)	Shop(s) / Office(s)	Factory(s) / Warehouse(s)
What do I want to do with the footage?	Stream it to my phone?	24/7 recording in the event of robbery?	Monitored Live
Digital or Analogue	Wired / wireless	PoE (Power over Ethernet)	Do I need Audio?

### A thought to ponder

Security offers a peace of mind no one can afford to be without. In the event of intrusion, theft or damage to property, as evidence of a crime or assault, or to simply monitor and protect what is precious to us, it is invaluable.

We need 24/7 surveillance and 24/7 access to that footage. We need better ways to store, access, and search & retrieve the enormous amounts of security footage recorded these days.



We should make use of the Cameras and Intelligent DVR's, with large capacity hard drives, that are out on the market that offer 24/7 multi-channel live streaming, door intrusion, smoke alarm alerts, image analysis, Intelligent search capabilities that can locate an event down to the minute of a day, facial recognition, people counting, object tracking, the possibilities are endless and evolving.

Security at this level saves time, saves money, resources and may even save a life. Add to that, while sitting in your lounge room or on other side of the world, you can be viewing your cameras in real HD or sent alerts, either in txt message, email or actual real time video snippets from your security surveillance system.

It's an exciting future that lies ahead in Surveillance and Security and that's why we recommend you talk to experts for advice.

At [aussiesurveillance.com.au](http://aussiesurveillance.com.au) we wish you all the best in finding the product that's right for your needs and our further advice is never more than our website away.

*This document was written as a guide only. For further information please contact Aussie surveillance.com.au*

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