

Wireless Camera Systems

Generally, it is good practice to use a local wireless provider for the wireless part of any video system. A local provider can do a site survey to insure that optimal selections of radios and antennas are made. A local provider can be available to “tune” the radio system for reliable performance, insure there will be no interference from other radio systems, and insure that authorized frequencies will be employed. IVC video systems are operating with IP ready wireless equipment from many different wireless companies.

If the radio installation is simple, meaning the distances do not exceed 300 meters and the link between the radios is completely unobstructed, IVC can provide wireless equipment for the project.

Generally, IVC offers two categories of wireless solutions:

1. IVC cameras equipped with short range, 802.11, WiFi radios.
 - a. Easy to install
 - b. Operates well up to 300 meters if the radio path is completely unobstructed.
 - c. Lower cost
2. IVC cameras operating with separate wireless devices.
 - a. Operate over longer distances if the proper antenna is selected and if the radio path is unobstructed.
 - b. Provides more bandwidth and thus able to accommodate several cameras per radio

IVC can incorporate 802.11 radios into many of its cameras making them easy to install and configure. If longer ranges are required, consider using separate, 5.2 to 5.7 Ghz radios as shown below.



Camera Radio - Subscriber Unit or SU

Each camera radio can accommodate multiple cameras depending on the desired frame rate and the video codec.

Each camera can be located up to 100 meters from the radio as that is the distance limit of the camera-to-radio cable.

The camera should be located for its optimal Video View, and the Camera Radio should be located to provide the best view of the Access Point.



Access Point or AP

Each AP can receive signals from Camera Radios, (SUs), that are in a 60 degree wide area as shown.

Accordingly, the group of six APs shown above provide 360 degrees of coverage.

Note, if antenna reflectors are used with the APs, the 60° area will be significantly narrowed.

