

Outdoor Long Distance Wireless Surveillance Solution

Overview:

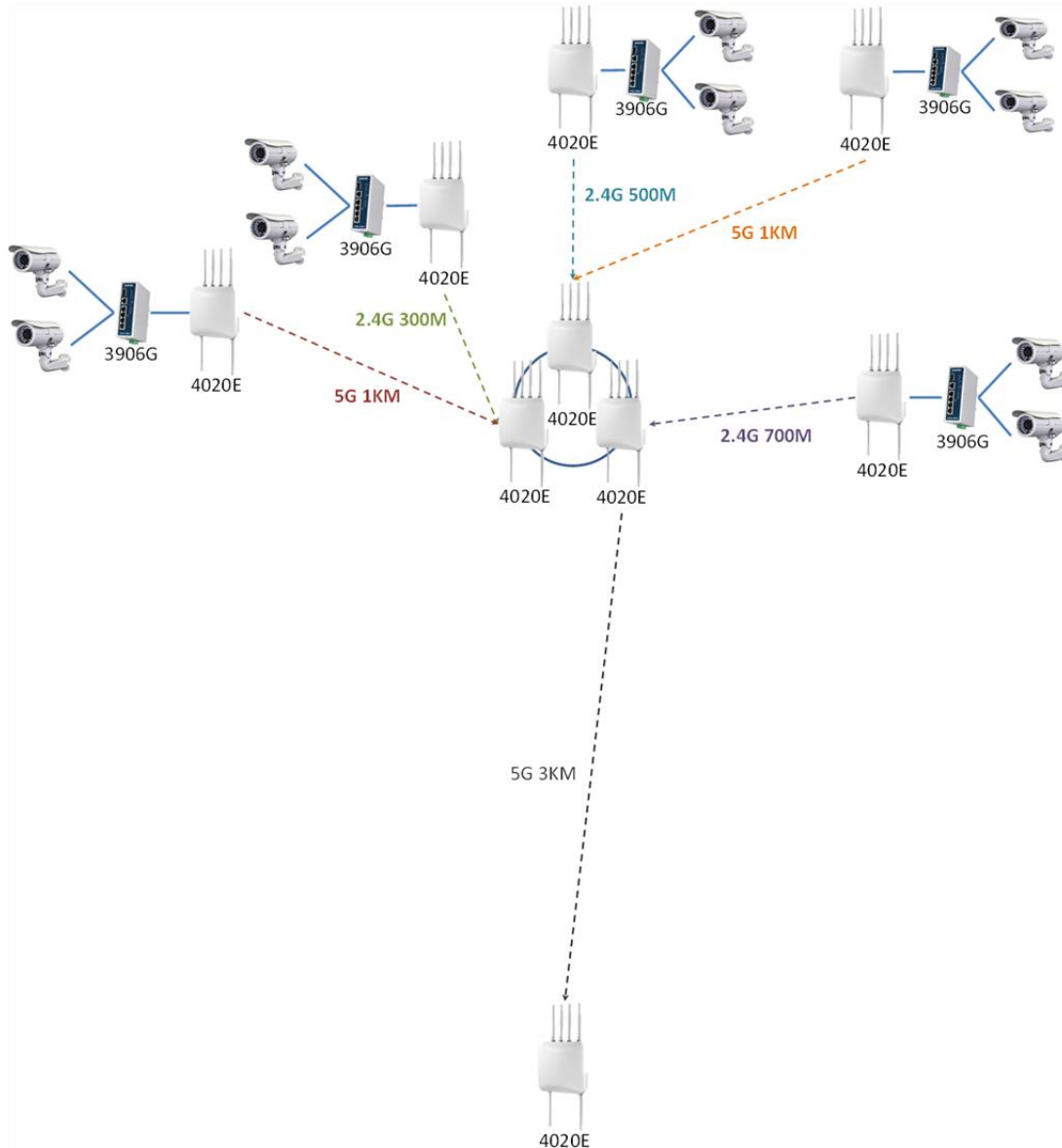


Wireless video stream transmission is a big challenge in any wireless network; the biggest concerns are stable transmission and bandwidth when the network topology designs. Recently, the wireless product in the market has been more and more common that supported IEEE802.11ac, it can support you with more bandwidth in wireless transmission. Not only to have a big bandwidth to transmit, but also the outdoor environment needs to have a rugged and waterproof product to keep it work excellent in the harsh environment, customer have to choose a reliable product to ensure that high quality of transmission.

Requirement:

- Long distance wireless transmission
- Waterproof for wireless product
- Video stream transmission with a WIFI connection
- Stable operation under high/low temperature

Solution:



In the case, there has long distance between the field site and control center. The customer cannot use fiber because wiring problem, so Satel Benelux provides the latest wireless solution for this case.

The JetWave 4020E Industrial Dual Band Dual Radio 802.11ac Wireless AP has built-in dual radio support 2.4G and 5G band to transmit data at the same time, also can be used high power external wireless antenna to extend transmission distance.

Because of topographical constraints, field site can't send the data back to control center directly over wireless, so they found the highest place to be the relay station. Field sites install a JetWave 4020E Industrial Dual Band Dual Radio 802.11ac Wireless AP and connected to a JetNet 3906G which provide power and receive video from two IP cameras at the same time; Then the JetWave 4020E in the field site has to transmit data to the relay station, and relay station has three JetWave 4020E connected together.

Two JetWave 4020E in the relay station are responsible for collecting videos from IP cameras which in the two field sites, and send all videos to third JetWave 4020E by wire. The third JetWav 4020E Industrial Dual Band Dual Radio 802.11ac Wireless AP does not only function as a means for collecting videos from others, but also responsible for connecting to one field site. Besides, the third JetWave 4020E responsible for sending all videos which from five field sites to control center as well, 802.11ac mode supported help it to have a stable transmission with large bandwidth. Again, Korenix successfully provides a high quality performance wireless solution for the customer.

Main products:

- JetWave 4020/4020E Industrial Dual Band Dual Radio 802.11ac Wireless AP
- JetNet 3906G Industrial 6-port Gigabit IEEE802.3af/at PoE Switch
- JWDA-2.4G-12dBi-NF JetWave Directional Sector Antenna
- JWDA-5.8G-23dBi-DP-2xNF JetWave Directional Panel Antenna

Why JetWave 4020/4020E:

- Dual Band Dual Radios, 2.4G 802.11n + 5.8G 802.11ac Wave 1, 3rd Radio by option
- Up to 1.16Gbps concurrent performances
- Internal Dual band 9/10dBi 4T4R MIMO Antenna for both Ceiling/Wall-mounting installation
- N-Type Connector for external antenna (4020E)
- Dual M12 Gigabit Ethernet Bridging or NAT Routing

Why JetNet 3906G:

- 6-Port Gigabit PoE Switch
- 4-Port IEEE 802.3af/ 802.3at PSE
- 110Watts PoE output ability
- Embedded DC 48V Booster
- 9KB Jumbo frame support
- Mega Pixel IP surveillance network solution

About us:

Satel BV is a manufacturer and supplier of Systems for both Mission Critical and Licensefree Wireless Datacommunication systems and Perimeter Intrusion Detection Systems (PIDS).

We specialised in the ITS, GNSS, SCADA, Smartgrids and Maritime markets. With iQ Radio we have built an intelligent telemetry platform, including UHF, LoRa, 4G NTRIP routers, Wi-Fi & custom datalogger solutions.