

What to Consider About Cellular

Primary Factors to Keep in Mind for Your Projects

4G LTE Cellular services will remain the SIM technology of choice for the foreseeable future. Experts do not expect 5G technology to gain large market penetration in the commercial IoT space until 2025 at the earliest.

4G LTE upload speeds average between 2 and 5 Mbps. These speeds vary greatly by service area, usage rates over service area, and environmental factors. Cellular providers utilize data caps that average between 25 to 50 Gigs per month to minimize network impact and infrastructure loads. Exceeding data caps can incur high additional costs and cause bandwidth speed throttling to less than 156kbps in some instances.

Cellular Focus

Minimum Bandwidth Mode, Plus More Tips and Tricks

Minimum Bandwidth Mode is essential for cellular applications. Minimum Bandwidth Mode sets all transmits modes to on demand and limits Bridge to Cloud communications to small amounts of metadata only. On-demand video and historical recall is not affected.

- Take advantage of user permissions and access schedules to minimize on-demand activity.
- Set Web Timeout and Inactive Session Timeout to minimize inactive session connections.
- Use Motion Optimization to ensure efficient duty cycles.
- Use Eagle Eye CMVRs over Bridges to provide expanded buffer capacity and local storage.

Cellular Use Cases

Remote and Mobile: Best Locations for Cellular Applications

Eagle Eye Networks has examples of cellular connected applications in many markets across the world. Wireless LAN routers with cellular modems are the most common method for cellular connectivity to an Eagle Eye Bridge or CMVR. Using Wireless LAN cellular modems in mobile applications can provide remote access and cloud benefits in dynamic environments.

Some common cellular applications include remote service facilities (oil and gas infrastructure, communication hubs, sensitive environmental applications), mobile applications (service delivery vehicles, mobile personnel deployment, temporary monitoring solutions), and poor network infrastructure solutions (developing rural areas, unmanned infrastructure, remote terrain infrastructure).