# High-Performance Global Connectivity for IP Cameras

The convergence of IoT and security/surveillance cameras is surging, driven by technological advances in connectivity.

Integrating AI and cloud computing has enhanced functionality, enabling remote monitoring and intelligent analytics. This expansion has revolutionized security systems, offering greater efficiency and effectiveness in safeguarding assets and premises.

Cellular connectivity's greater speed, bandwidth, reliability and longevity —as well as the wider use of cameras in areas where leveraging WiFi or wired connectivity is inefficient—is increasingly becoming the preferred choice for IP (internet protocol) camera manufacturers.

### **Choosing floLIVE for Integrating Cellular Connectivity**

These camera-based solutions require global reach on one hand, with low latency and high throughput on the other, while meeting regulatory requirements such as data privacy, permanent roaming restrictions and more. At same time, cellular connectivity improves user experience and overall reduces deployment costs compared with other types of connectivity which might require cumbersome and not standard initial setup at user premises. The crucial elements OEMs are looking at connectivity are:

#### Localization

Attempting to use roaming for connectivity poses numerous challenges that impact how these solutions ultimately perform. By leveraging local connectivity on a global scale, the following are ensured:

- Performance: While advanced video codecs such as H.265 (HEVC), AV1 and VP9 require lower bitrate for High Resolution video streaming, they still demand low latency and high throughput and that cannot be met through roaming. Mission-critical data communications must be managed on a local level to increase performance.
- Permanent-Roaming Safe: Roaming restrictions, or outright bans, are increasing as more and more countries set forth regulations. By localizing data, compliance can be met simply – even in challenging regions such as Brazil, China, and Turkey.
- **Throttling Protection:** Local connectivity will help protect against potential throttling by visited networks, ensuring IP cameras get the network resource allocation they need.





#### **Regulatory Compliance**

Data privacy and sovereignty regulations are growing as more digital solutions become an integral part of operations. Visual data, in particular, is at heightened scrutiny and thereby, under more stringent regulations. floLIVE robust global network, with local Core Network POPs (Points of Presence), adheres to data privacy regulations such as GDPR and CCPA and allows highest level of compliance with data privacy and sovereignty.

#### The Most Robust Coverage

floLIVE offers resilient Multi-IMSI technology that provides local coverage on multiple networks and, overall, the largest global connectivity reach on the market. In the U.S. alone, floLIVE provides local coverage across all four major carriers for connectivity anywhere across the country. floLIVE's highly available network coverage ensures devices are "always on" through:

- Autonomous Switching: floLIVE Multi-IMSI technology means that a single SIM card holds multiple profiles and can automatically switch to the best available network. If a network fails, signals become weak, or hand off from one network to another is required, the floLIVE Multi-IMSI can automatically switch so that devices are always connected.
- Reaching Challenging Regions: Highly regulated regions in the globe have made connecting locally challenging, but floLIVE has a local presence in Brazil, Turkey, South Africa, and others so your deployments do not face restrictions.

#### Security

floLIVE provides higher security levels than other connectivity providers through:

- Tech Stack Ownership: We control the entire technology stack from SIM to the core network, through real-time billing and management. The floLIVE platform is continuously being tested for vulnerabilities so we maintain the highest security levels.
- Certifications: floLIVE is ISO-27001 and SOC2 certified.
- **Privacy:** The IP addresses of devices on our network are not exposed outside our network unless specifically requested by the customer.
- Network Control: As a default, we block incoming traffic to devices on our network, except for specific sources defined by our customer. We do the same for outgoing data traffic from devices outside.
- **Unique Identifiers:** We provide non-routable MSISDNs that cannot be accessed from outside (e.g. cannot receive SMS messages, unless requested by customers).
- **Private APNs:** We provide the same, private APN across multiple IMSIs to ensure data is securely routed to its destination via VPN from anywhere in the world.
- **IMEI Lock:** We leverage the ability to lock the SIM to the device to avoid fraud and other breaches.







#### **Commercially Attractive**

Selecting a connectivity partner for integration can feel risky, but floLIVE offers attractive benefits in addition to our core functionality:

- Local Rates: Roaming rates can be highly costly, therefore, local rates can offer better cost savings.
- **Self Steering:** floLIVE customers are empowered to determine their own steering logic instead of being restricted to a predetermined logic.
- Billing Flexibility: Camera OEMs can define the billing plans and packages to customers. Our connectivity management platform allows the flexibility of defining different types of plans – prepaid, postpaid, data pools, etc. and because it works in real time, it protects from overcharges due to consumption exceeding price plans.
- **Pay Only for Active SIMs:** The longer period from manufacturing to operation can mean higher costs when paying for inactive SIMs. With floLIVE, you only pay for SIM cards once they are active.
- **BYOC:** If you have pre-existing connectivity agreements, floLIVE can accommodate them through our Bring Your Own Connectivity (BYOC) model.

#### **Operational Efficiency**

floLIVE offers an agnostic and unified connectivity approach, so OEMs can customize connectivity with assurances that everything is interoperable, including:

- Single SKU Logistics: One SIM is capable of covering the world through floLIVE's global connectivity – greatly reducing manufacturing and operational costs.
- **SIM Choice:** All SIM types are supported, including plastic, embedded, integrated, virtual, eUICC, and eSIM.
- **OTA Provisioning:** You can dynamically download and change profiles over the air (OTA) for improved coverage.
- Unified Management and Control: Our connectivity management platform provides granular visibility for all devices, everywhere, via the same platform, offering benefits such as:
  - SIM ordering
  - Lifecycle management
  - Connectivity management
  - Billing & invoicing
  - Troubleshooting and self-service



#### Service and Support

Our follow-the-sun, 24/7, completely human support services can troubleshoot and resolve in real-time, with regional teams in China, Europe and the US to help OEMs in their onboarding process, as well as support in the respective time zones and languages.



## **Ready to Reach Out?**

Integrating cellular connectivity is a leap into a new market – but a value creating one when partnering with floLIVE. We'd love to tell you more and demonstrate how cellular connectivity is a game-changer in the camera OEM industry. <u>Reach out</u> to get the conversation going.