

APT SureStreamer HELI

A solution for reliable, low latency video communication for Public Safety Aviation

APT SureStreamer HELI is a mobile network access solution which meets the needs of public safety aviation professionals for surveillance and video transmission in emergency situations.

In an emergency, response time is critical. Police, fire-fighting, search and rescue services depend on fast and reliable audio and video communications.

This resilient, low latency solution enables high quality, simultaneous video streaming between mobile surveillance forces (helicopters, drones and vehicles), the Control and Command Centers, and the first responders.

On a low and constant latency of less than 0.5 sec. over 4G/4G+/5G networks (glass to glass) enables fast and efficient decision-making and action-taking, in real-time.

Multiple Applications & Users



Drone



Helicopter



Police



Firefighters

APT SureStreamer HELI for Public Safety Aviation Units

Ultra-low latency

Thanks to the TCP-free signal chain and the omission of channel bonding, the SureStreamer HELI ensures the lowest latency achievable and significantly lower than traditional broadcast video codec solutions.

Ultra-reliable

SureStream technology is a streaming technology from Worldcast Systems based on diverse streaming sending multiple copies of your video stream across different carriers (Verizon, AT&T, Sprint, Vodafone, T-Mobile...*). The SureStreamer HELI achieves high stability of the IP connection, even under difficult circumstances. SureStreamer HELI enables real-time video transmissions while maintaining constant low latency and high video quality.

*SureStreamer HELI operates on any LTE/LTE+/5G Carrier globally, carriers listed are for illustrative purposes.

Ultra-secure

Utilizing secure VPN encrypted links for all transmissions over the cellular network and the public Internet, end-to-end video is secure and safe from prying eyes.

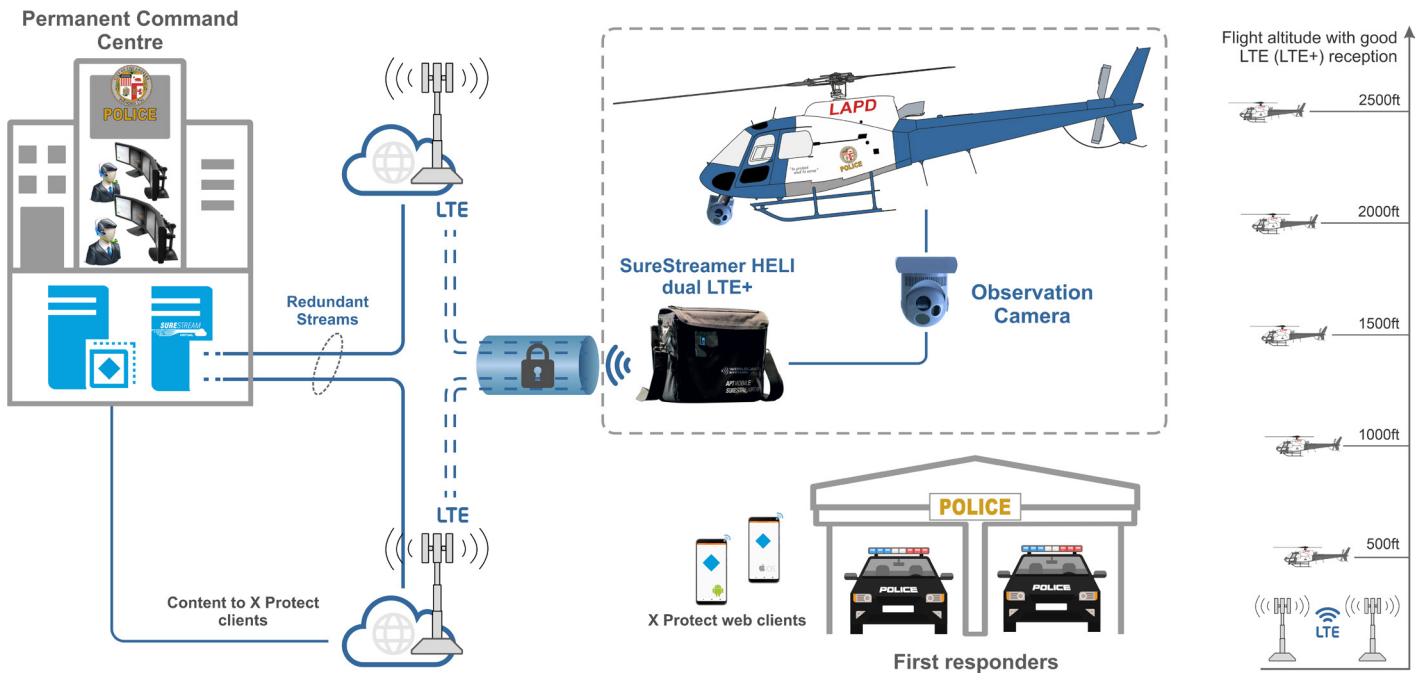
Low operating costs

By distributing content over affordable 4G/4G+/5G mobile internet links, the SureStreamer HELI functions as a replacement for expensive Microwave installations or Satellite links. Using the unique tool-sets and features incorporated within SureStream, the SureStreamer HELI is compatible with any network with the use of standard SIM cards.

Immediate and simple configuration

Easy to use by all personnel, the SureStreamer HELI is ruggedized and lightweight, comes in a practical shoulder bag, and requires zero field configuration, boot and connect!

High quality video transmission in less than 0.5 sec. air to ground!



“With the SureStreamer HELI our first responders can have multiple and simultaneous access to the ‘eye in the sky’ in real time. The team on approach make critical split-second decisions without direction or communication from the pilot!”

Technical Features

APT SureStreamer HELI	
The SureStreamer HELI with H.265/H.254 video encoder comes in a compact shoulder bag. Weight with battery, modems and video encoder: ~2.5 kg / < 5.5 lbs	
System Power	
DC Input Voltage	12 VDC from LiPo battery and/or DC PSU
System Operating Time*	Typical 4 hours (can vary depending on additional USB load) *Aux battery can extend the operating time to above 6 hours
Video	
Interface	1x HDMI Input/Output (SDI / Composite options also available)
Resolution / Bitrate / Mode	HD and SD / 0.8 to 12Mbps / CBR, VBR
Encoding	H.264 Base to High Profile & H.265
Protocols	HTTP, RTMP, MPEG-TS, ONVIF, RTSP
Audio for Video Encoding	AAC, MP3
Audio Sampling Rate	Adaptive, 32k,44.1k, 48k, 64k, 96k, 128k, 160k, 192k
Network and Transport	
Streaming	Simultaneous Streaming over 2 Modems (SureStream Protection on Packet level)
Security	Encrypted VPN tunnel
Latency	Low, TCP-free transmission. Typical: glass to glass ~0.5 – 1.5s (with Milestone X protect decoding)
Video and Network Payload	Limited by the mobile network throughput. LAN: Video input typical 2.5 Mbps, WAN: 2x to 4x 2.5 Mbps (depends on selected protection level)
Air Interface (Modems)	2x 4G+ (LTE A) Modems as standard (optionally 5G) - LTE Bands, US : 1, 2, 3, 4, 5, 7, 12, 14 , 29, 30 & 66 - 4-band Carrier Aggregation
Required LTE Services	2 SIM cards on different cell providers (one on each)
Management	No field configuration required, remote setup via WEB GUI
Internet Access	Yes, wired or wireless (WiFi IEEE 802.11g/n/b)

Technical specifications are subject to change without prior notice - On project, WorldCast Systems may offer distinct specifications. Specifications on the offer prevail those in this document.

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