

Ultra-compact video encoder with 5G cellular for fast, secure, low-power deployment.

#### Real time video streaming at the Speed of 5G

The **FireBird™ F-100 5G** brings real-time intelligence to the edge with next-gen cellular connectivity and enhanced SWaP performance. Built on the trusted FireBird™ F-100 architecture, this compact encoder now delivers tactical-grade video streaming via **5G**, all at just **250mA** of power.

The **FireBird<sup>TM</sup> F-100 5G** comes pre-installed with **FireLight<sup>TM</sup>**, our bandwidth efficient video encoding software, which enables real-time video streaming at high resolution, up to **30fps full HD**. If the network bandwidth drops, it adjusts the video encoding automatically, down to as little as **1 kbps**, while maintaining usable image quality. Whether deployed on static sites, drones, tactical vehicles, or embedded in soldier kits, this unit provides continuous operational visibility anywhere, under any network condition.

## **Key Capabilities**

- Integrated Comms: Built-in 5G/4G modem with GPS and lowlatency networking
- ✓ Power-Efficient: Consumes ~4W (250mA @ 12VDC), ideal for battery use
- ✓ Video Inputs: Supports ONVIF/RTSP (video protocols sent from camera) and tactical sensors (EO or IR) or USB
- Ultra-Low Bandwidth Encoding: Live streams from just 1 kbps with adaptive compression
- ✓ Total Recall™ High Resolution Pixels Retrieval: Retrieve hi-res pixels from selected areas of interest within the low-res stream
- Multi-Stream Support: Simultaneously stream multiple feeds from the same encoder with adjustable settings
- Edge Recording: Onboard SD storage preserves original source footage for review or retrieval
- Secure by Design: AES-256 encryption





## **Built for High-Mobility Video Streaming**

**Compact** (93.3mm x 49.5mm x 35mm) and **lightweight** (0.13 kg), the FireBird™ F-100 5G is designed for operations where space and power are limited. It's ideal for:

- Dismounted soldier systems
- Small UAVs and ground robotics
- Tactical border patrol units
- Remote surveillance operations

#### Stream Anywhere, Integrate Everywhere

- Transmit over 5G, satcom, mesh, radio, or cellular
- Compatible with third-party VMS ONVIF, RTSP, VMS, ATAK, and NATO C2 platforms Videosoft secure apps (Windows, Android, iOS) also available
- Auto-reconnect and stream resync ensure uninterrupted situational awareness

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# FireBird™ F-100 5G Specification

Streaming Capabilities	
Camera Inputs	1 Ethernet, 1 USB-C Ethernet adapter or 1 USB camera with UVC, up to 4 with a switch
Stream Outputs	Up to 2 simultaneous stream outputs in full HD
Encoding	1 kbps low-res to 3Mbps full HD transcoding and Native mode
Mechanical & Environmental	
Dimensions	93.30mm (L), 49.50mm (W), 35mm (H)
Operating Temperature	-30°C to +85°C
Power Input	Power Input 7-14 V (DC plug 5.5x2.5mm center pin), Power Consumption ~4W
Video in	IP Camera over GbE, USB Camera over USB 3.0
Network	GbE (RJ45), 4/5G Cellular
Storage Media	32GB EMMC (OS installed), Up to 1 TB Micro SD
Weight	0.13KG
Consumption	250mA @ 12VDC
Interface & Connectors	
Ethernet	1x RJ45
USB	1x USB-OTG (Type C)
Recording	Micro SD card slot (up to 1Tb) or external storage
Modem	5G LTE cellular modem w/GPS Micro SIM Push-Push slot
Antenna Connection	2x SMA Female – LTE Main and GPS (LTE Aux optional to replace GPS)
Hardware-based security	Support TPM 2.0 and Secure Boot
Accessories	
Included	2x Multiband Antennas, Power connector and lead