

FIREBIRD™ F-100 5G VIDEO ENCODER

NAVICOM AVIATION

By  videosoft

COMPACT, SECURE, AND BUILT FOR NEXT-GENERATION UAV OPERATIONS, THE FIREBIRD™ F-100 5G DELIVERS RELIABLE VIDEO INTELLIGENCE ANYWHERE OVER 5G.

KEY CAPABILITIES

Universal Connectivity:

- Built-in 5G/4G modem with GPS
- Transmit over 5G, satcom, mesh, radio, or cellular
- Auto-reconnect & stream resync for continuous awareness

Optimized Video Performance

- Real-time streaming from 1 kbps to Full HD 30fps
- Multi-stream support with adjustable settings
- Total Recall™: retrieve hi-res pixels from low-res stream

Compact & Power-Efficient

- Dimensions: 93.3 × 49.5 × 35 mm
- Weight: 0.13 kg
- Low power draw : ~4W (250mA @ 12VDC)

Secure & Reliable

- AES-256 encryption, TPM 2.0, Secure Boot
- Edge recording on SD storage during link dropouts
- Compatibility with ONVIF, RTSP, ATAK, NATO C2, Videosoft apps

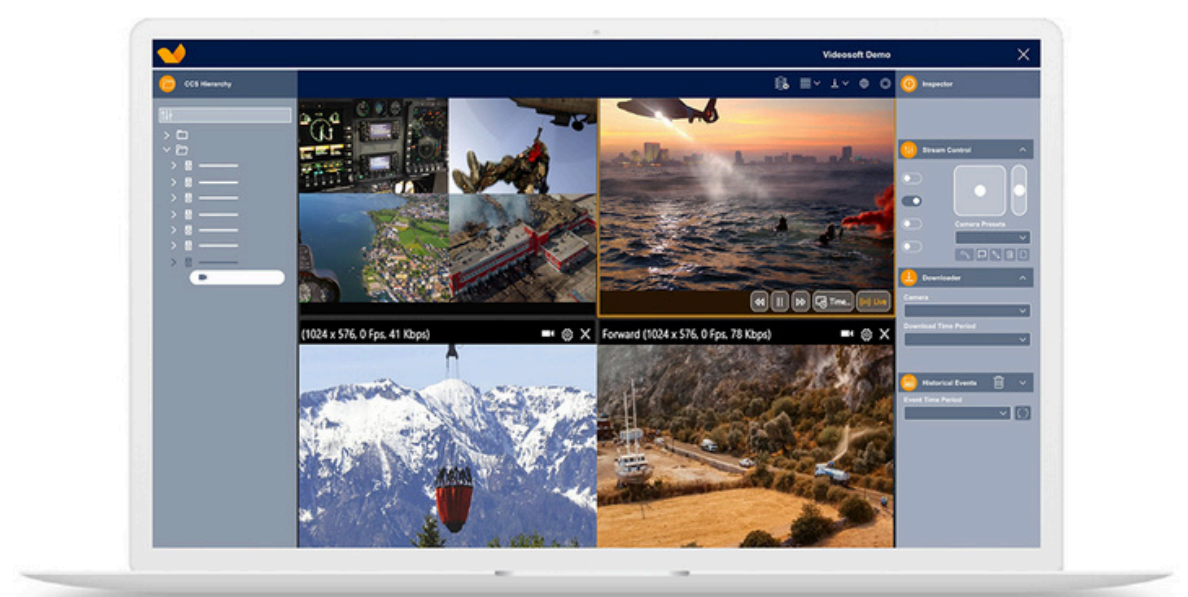
Delivering real-time, high-quality streaming **over 5G** with **ultra-low latency**, FireBird™ F-100 5G ensures mission visibility even in **challenging environments**.

APPLICATIONS

- Small UAVs & ground robotics
- Tactical border patrol units
- Remote surveillance operations



Equipped with **FireLight™ adaptive encoding**, the F-100 5G **automatically adjusts from Full HD to 1 kbps**, maintaining clear visuals while minimizing bandwidth use. Optimized for **UAV integration**, it balances high performance with low weight and power draw.



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 3 Mbps 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 7-14V (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 1TB 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

Interested in integrating FireBird™ F-100 5G into your UAV system?
Contact Navicom Aviation for technical consultation, pricing, or demo scheduling.

