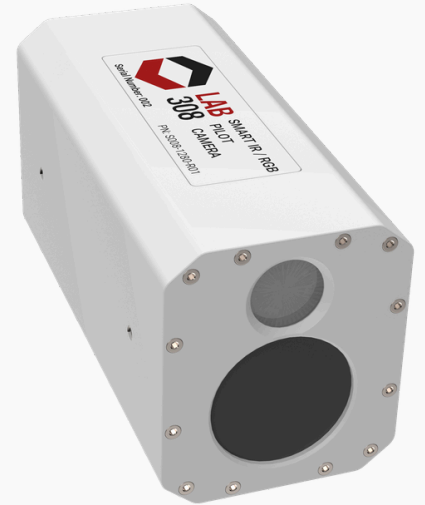


SPC - 1280 Dual | Next Gen HD RGB+IR Imaging

HD Thermal & RGB Cockpit Video. Passive Mapping. Streaming Video.



Smart Pilot Cam - 1280 Dual HD IR / HD RGB

\$48,600

Rugged Aviation Camera
Integrated GPS/INS
Easy to Integrate



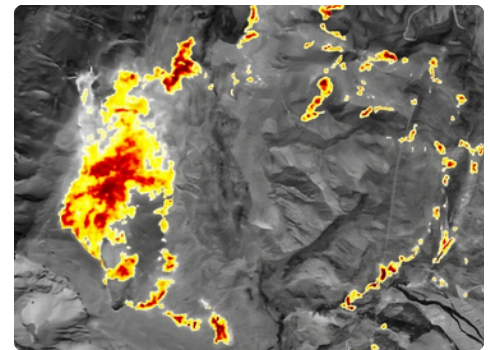
Cockpit HD-SDI Video

Radiometric 720p HD LWIR provides clear visibility through thick smoke and darkness with colorized IR hotspots. A 720p RGB feed delivers clear color imagery with no vibration artifacts.



HD IR/RGB Streaming Video

720p HD LWIR camera & 3.2MP RGB camera provides geospatially accurate and detailed video streams overhead any incident. Passive mapping allows for real-time maps when Cloud connected.



Orbit Ready Data Collection

Simple to integrate fixed camera that has no flight path requirements and collects high resolution imagery in multiple bands and supports cloud processing.

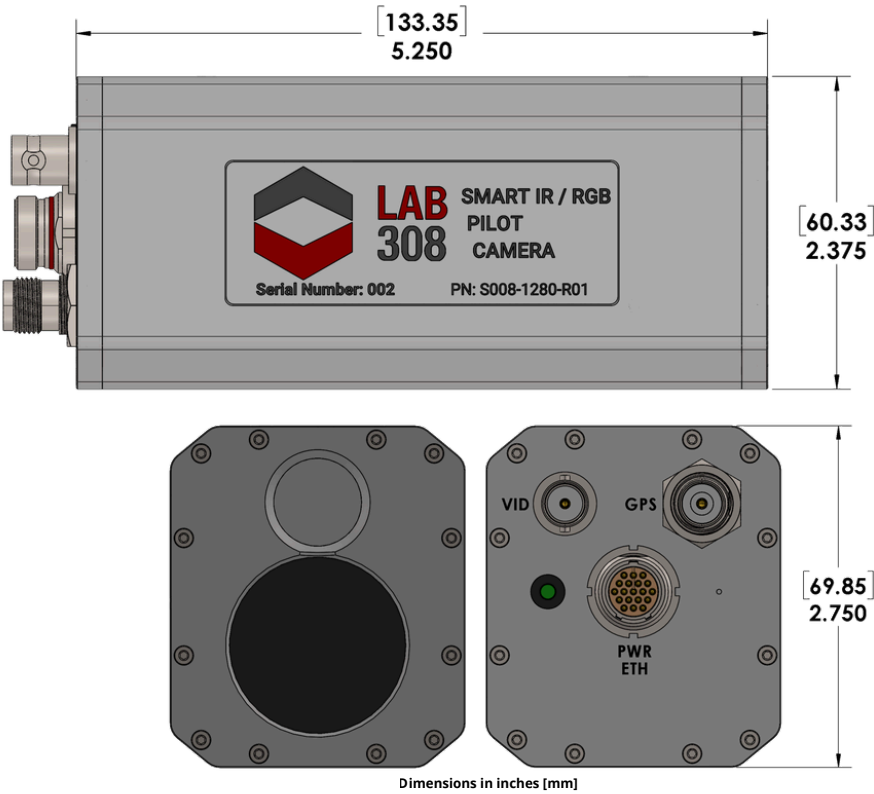
SPC - 1280 Dual CAMERA CAPABILITIES

- 720p HD-SDI Low Latency IR or RGB video
- 720p H.264 FMV with MISB KLV (RGB & IR simultaneous)
- Full Res Geo Snapshots with IR temp
- Passive IR mapping with No Flight Path Requirements
- Onboard Multi-Day Storage and Native Cloud Offload
- Environmentally Sealed and Aviation Ready

Built for aerial fire operations.

// SPECIFICATIONS // SPC - 1280 Dual

Weight	600 g / 1.3 lb
Power	20 W / 28V DC
Sensors	LWIR (720p); global shutter RGB (720p)
Radiometric	±10°C at operating altitude
IR GSD at 2,500 ft	0.65m (HD variant), 1.3m (SD variant)
RGB GSD at 2,500 ft	0.52m
HFOV x VFOV	60° × 48°
Connection	1 Gbps Ethernet, HD-SDI
Cloud	Hosting service provider agnostic
GPS	L1 GPS multi-constellation or digital input
Mounting	Threaded hardpoints; optional brackets



AVAILABLE OPTIONS Contact us for customized variants

Configuration	Size (L x W x H)	Weight	Purchase	Lease: 3 / 6 months
HD (720p) · 60°	5.25" x 2.375" x 2.75"	600 g / 1.3 lb	\$48,600	\$10,850 / \$18,100
SD (480p) · 80°	5.25" x 2.375" x 2.75"	545 g / 1.2 lb	\$40,250	\$8,650 / \$14,350

SPC - 1280 Dual HARDWARE OUTPUTS

HD-SDI Low Latency Video

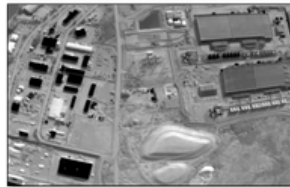
Direct Cockpit Viewing | SMPTE 292M | 1.485 Gbit/s

H.264 MISB KLV Digital Video

MISB ST 0601, H.264 over IEEE 802.3ab (1Gbps)

Full-resolution Geo-Snapshots with IR temp

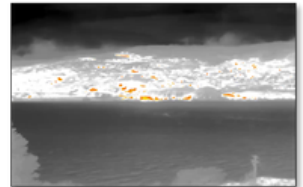
High quality stills that drag and drop into any GIS application



HD IR



HD RGB



IR TEMP

SPC -1280 Dual SOFTWARE OUTPUTS / CLOUD

- Orthorectified image mosaic with IR hotspots
- H.264 Streaming Video
- IR perimeter of active fire (.SHP, .KML)
- Compatible with leading GIS and fire / Common Operating Picture software packages.*
- Full- and low-resolution geo-snapshots



1 Passive Data Capture

Lab 308 fixed, wide FOV aviation cameras create a stream of image data with embedded geolocation.



2 Uplink

Starlink, SATCOM or cellular link transmits Lab 308 image streams to the cloud for more detailed processing.



3 Cloud Processing*

Open source geospatial tools stitch Lab 308 imagery stream into full fire imagery products with no human involvement.



4 Fire Maps & Streaming Video

High resolution fire maps with accurate fire location available after every aircraft orbit. IR video from any Lab 308 sensor can be streamed to GIS or video services.

*No ongoing software licensing cost is required to operate Lab 308 cameras in direct viewing mode. Cloud provider and GIS software may incur usage charges.

At Lab 308, we engineer mission-critical thermal imaging systems built for extreme aerial firefighting environments.

SCHEDULE AN INTRO CALL OR FLIGHT DEMO

sales@lab-308.com | www.lab-308.com



Preliminary specifications - subject to change. October 2026
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