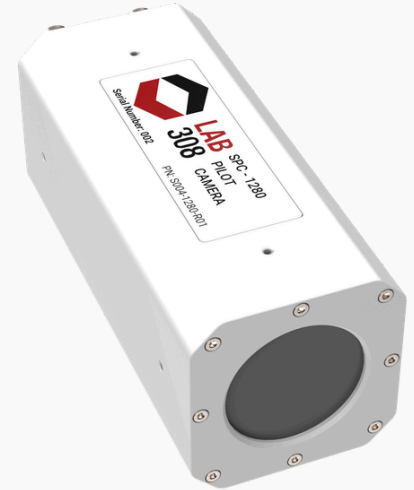


SPC - 1280 | Next Gen HD IR Thermal Imaging

Smart Thermal HD Imaging. Passive Mapping. Realtime Video



Smart Pilot Cam - 1280 HD IR

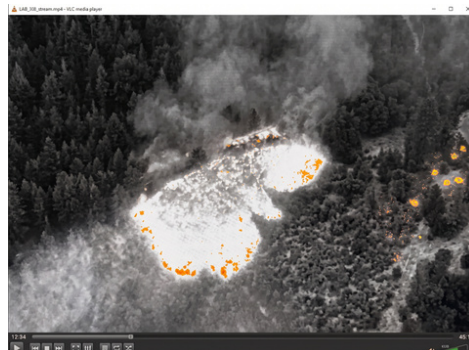
\$39,800

Rugged Aviation Camera
Integrated GPS/INS
Easy to Integrate



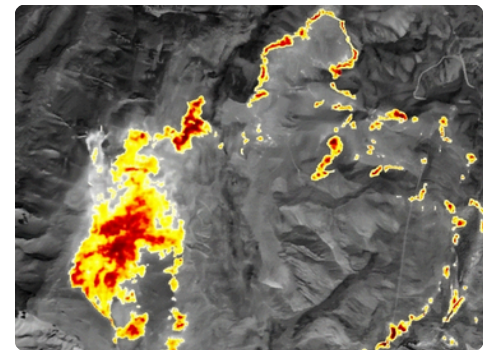
Cockpit HD-SDI Video

Radiometric 720p HD LWIR provides clear visibility through thick smoke and darkness with colorized IR hotspots. HD-SDI digital video output provides low latency video for on aircraft displays.



HD Streaming Video

720p HD LWIR 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.

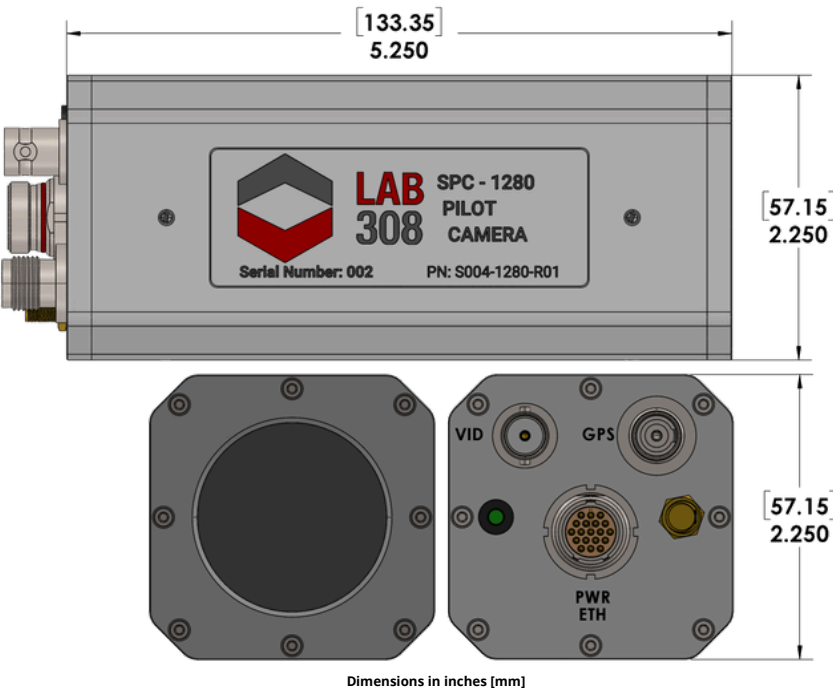
SPC - 1280 CAMERA CAPABILITIES

- 720p HD-SDI Low Latency HD IR video
- 720p H.264 FMV with MISB KLV
- 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

Weight	430 g / .95 lb
Power	<10 W / 28V DC, PoE upon request
Sensors	LWIR (720p); 1280x1024, 12 micron
Radiometric	±10°C at operating altitude
IR GSD at 2,500 ft	0.65 m (HD variant), 1.3m (SD variant)
HFOV x VFOV	60° x 48°
Connection	1 Gbps Ethernet
WiFi	Upon Request
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

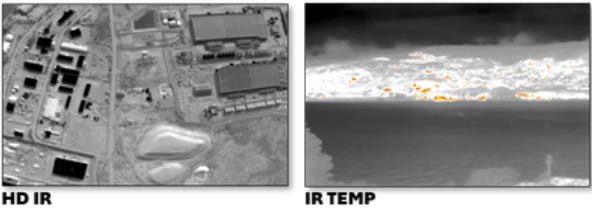
Configuration	Size (L x W x H)	Weight	Purchase	Lease: 3 / 6 months
HD (720p) · 60° (S004-1280)	5.25" x 2.25" Square	430 g / .95 lb	\$39,800	\$8,520 \$14,200
SD (480p) · 80° (S004-640)	5.25" x 2.25" Square	375 g / .82 lb	\$29,450	\$5,875/ \$9,250

SPC - 1280 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



SPC -1280 SOFTWARE OUTPUTS / CLOUD

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

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