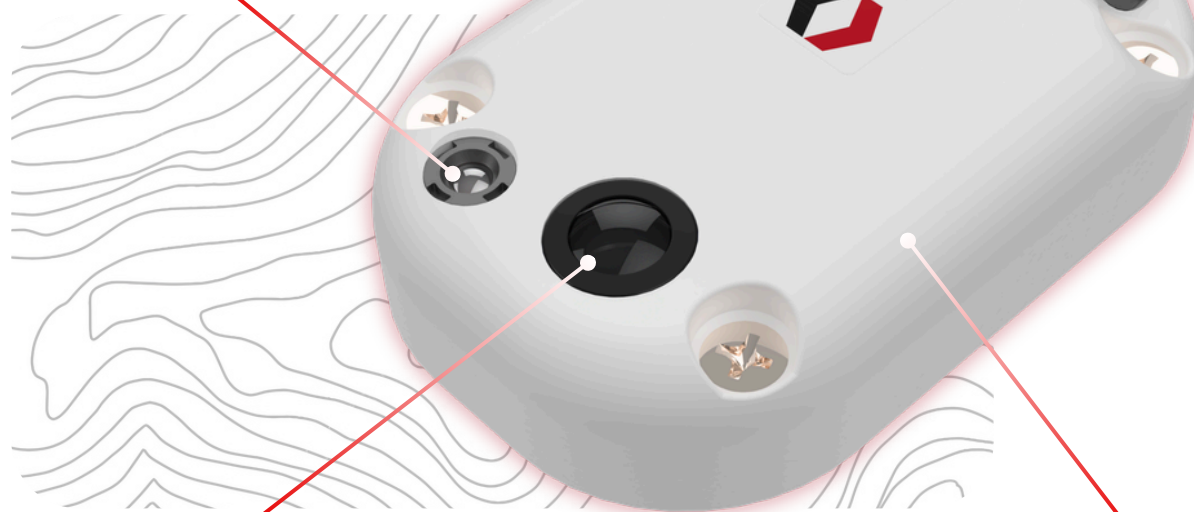




miniARINC

GPS Antenna Sized. Airborne Fire Mapping. Streaming video. In a *tiny* form factor.

IR Sensors (x3)



3.2mp Color Sensor

miniARINC GPS Antenna Mounting Interface

IR + RGB Mapping.
Tiny Form Factor.
Orbit Friendly.
Realtime Video.

**Coming in
2027**

miniARINC Mapper
3 IR | 1 RGB

Price TBD

Tiny Rugged Aviation Camera
Integrated GPS/INS
Easy to Integrate

Patent Pending



GPS Antenna Sized

3 LWIR cameras coupled with horizon-to-horizon RGB. Mini-ARINC footprint makes this the smallest wildfire mapping system by *far*.



Realtime Video Streaming

Easily add IR video streaming via known MiniARINC form factor making this the easiest wildfire mapping system to mount by *far*.



Orbit Friendly Operation

3 IR cameras capture & process wide-area fire perimeters completely autonomously, delivering the most orbit-friendly operation by *far*.

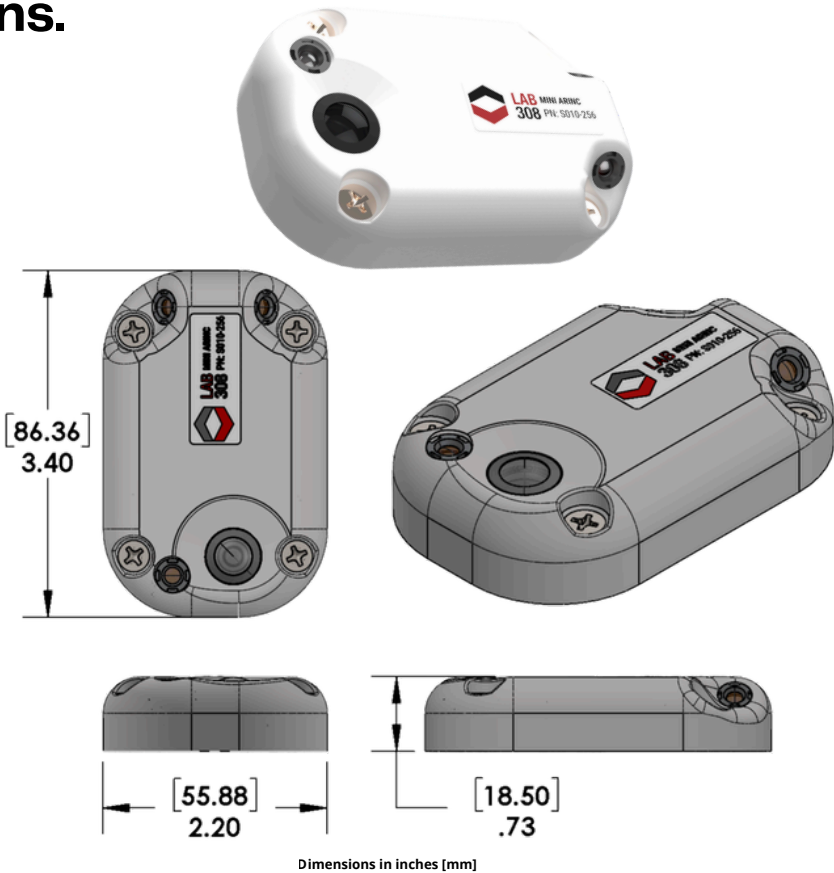
miniARINC CAMERA CAPABILITIES

- Qty 3 Tiny Infrared Core, 3.2MP RGB in Small Form Factor
- 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 // miniARINC Mapper

Weight	<150g
Power	15 W / 12-28V DC
IR Sensors	3x LWIR
Radiometric	±10°C at operating altitude
RGB Sensor	3.2 MP
IR GSD at 2,500 ft	2.8m
RGB GSD at 2,500 ft	0.95m
Combined HFOV	150°
Connection	100 Mbps Ethernet
Cloud	Hosting service provider agnostic
GPS	L1 GPS, multi-constellation or digital input
Mounting	Mini-ARINC hole pattern



AVAILABLE OPTIONS Contact us for customized variants

Configuration	Size (L x W x H)	Weight	Purchase
miniARINC Mapper	3.4" x 2.2" x 0.75"	<150g	TBD

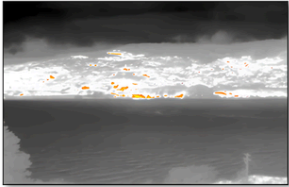
miniARINC HARDWARE OUTPUTS

H.264 MISB KLV Digital Video

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

Full-resolution Geo-Snapshots with IR temp

High quality stills that drag and drop into any GIS application



miniARINC 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

