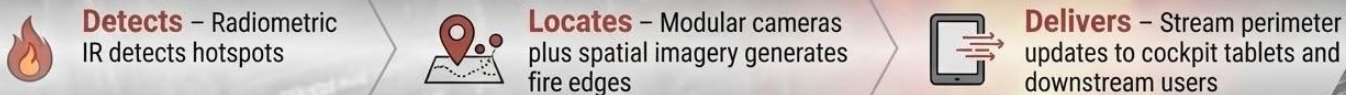# Longwave Spatial Image Reconstruction
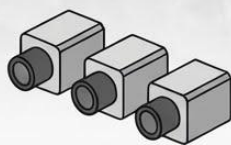## Smart Modular Camera

Lab308 LSIR Cameras

"Smoke-penetrating infrared that gives Air Attack clear, actionable perimeter intelligence."

Detects – Radiometric IR detects hotspots

Locates – Modular cameras plus spatial imagery generates fire edges

Delivers – Stream perimeter updates to cockpit tablets and downstream users

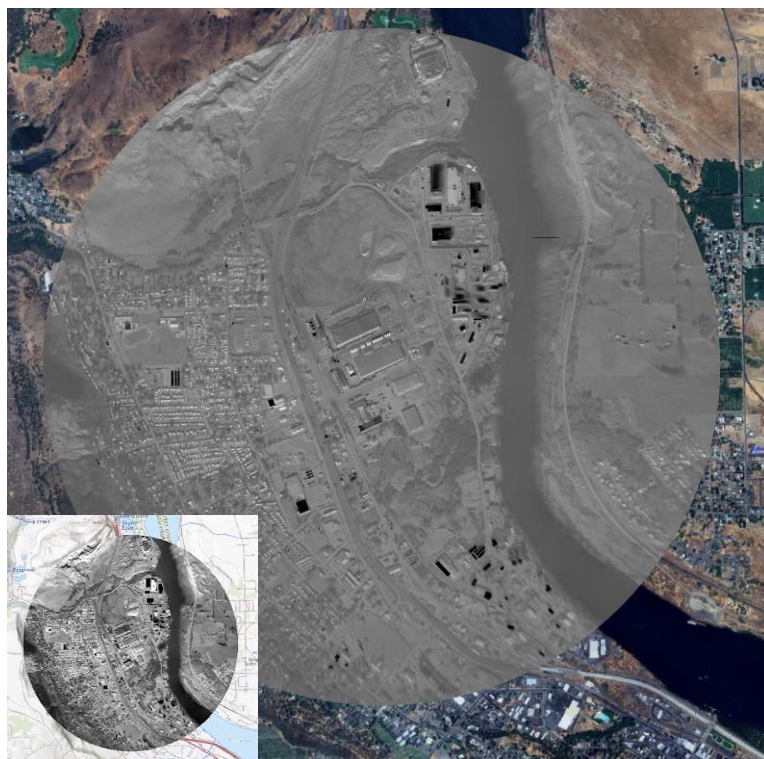| Modular Array	Orbit Friendly	Cloud Processing	Sizing Estimate
Miniaturized fixed modules with no moving parts	No specialized mow the lawn patterns	Demonstrated cost of $1 per hour with onboard connectivity	Automatically produced every 2 minutes after aircraft orbit

Lab 308 LSIR cameras are designed to integrate onto all aerial fire platforms with no change in operational usage and passively collect, interpret and deliver high quality IR maps and wildfire perimeter estimates in real-time.

NO OPERATOR Required

NO FLIGHT PATH Required

Configuration	Coverage @ 2.5k ft AGL	Coverage @ 5k ft AGL	Purchase Price	or	Lease Price	Hourly Operation
Single Camera	5,600 acres	14,000 acres	$20,950		$7k per year	<$1 per hour
Three Camera Array	10,200 acres	24,000 acres	$52,850		$17.5k per year	<$1 per hour

LSIR modules contain integrated GPS/INS and are IP67 weatherized and EMI tested. Onboard storage of 16 days images or 7 days images + H.264 video. Hourly operation computed via Google Cloud, not inclusive of any connectivity charges. Compatible with major wildfire GIS tools and services.