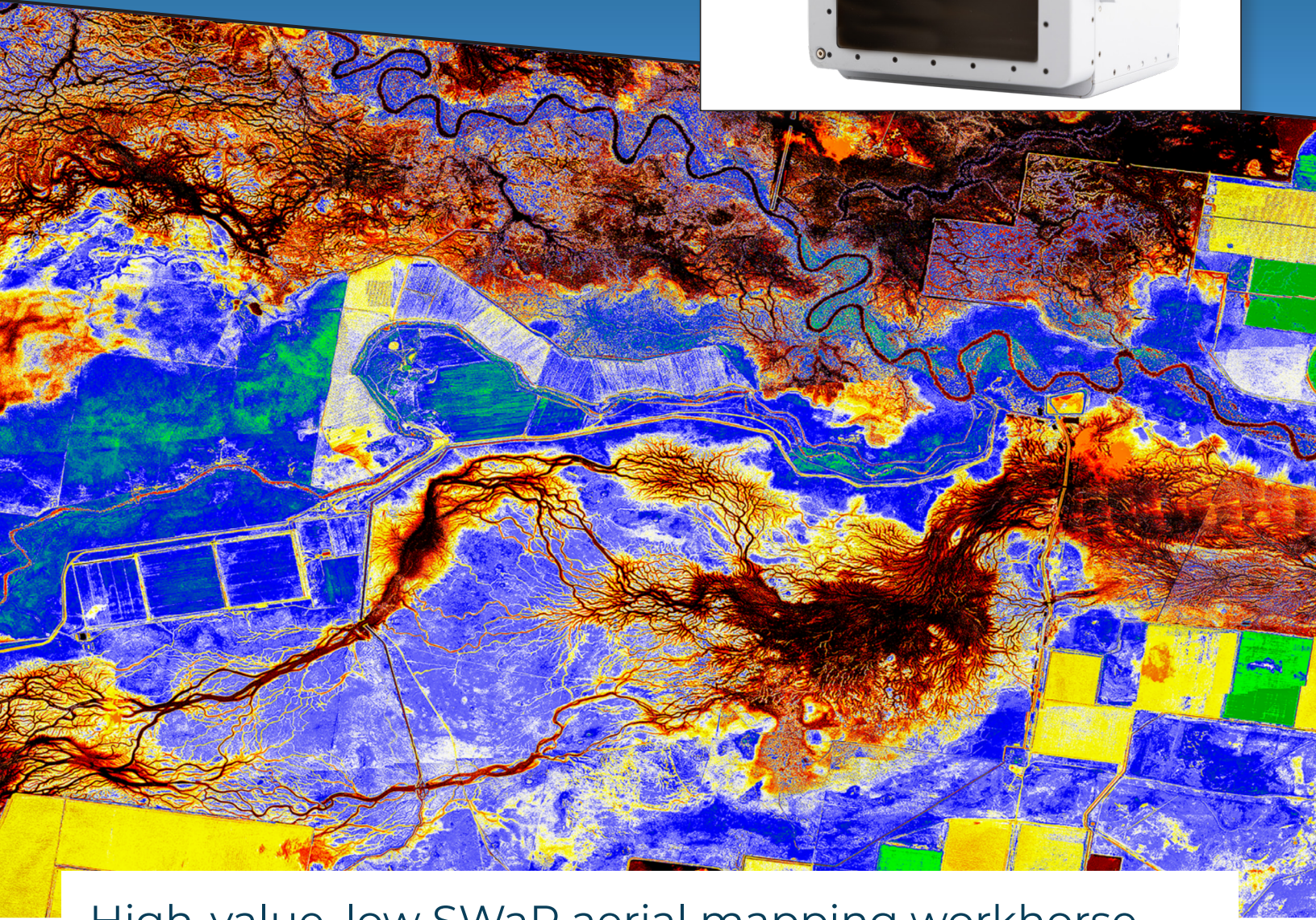
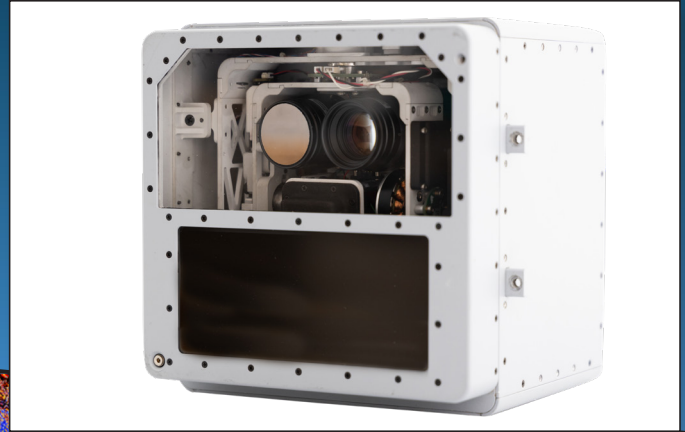




OVERWATCH
IMAGING

TK-7 SMART SENSOR



High-value, low SWaP aerial mapping workhorse

The **TK-7 SMART SENSOR** payload is a versatile mapping and ISR system with RGB, NIR and LWIR sensors housed in a SWaP-optimized enclosure for ease of integration into a variety of platforms. Wide and narrow lens configurations are available depending on user needs and mission parameters. The TK-7 is a proven system utilized extensively around the world for Fire and Emergency services, Tactical ISR, and a wide variety of inspection and mapping missions.

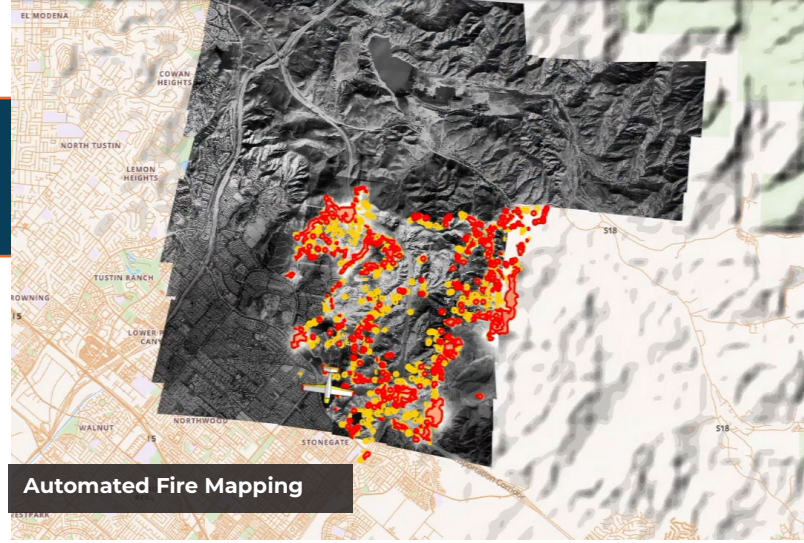
Key Features

- Nadir orientation optimized for wide-area, high resolution coverage
- Powerful suite of onboard processing and AI functionality
- Day & night capabilities
- Optimized for low to mid altitude and air speed

TK-7

- Nadir oriented step-stare imagery across roll axis delivers optimal coverage and resolution
- Automated wide-area, multi-band imaging
- On-board image rectification and stitching
- Low bandwidth requirements
- Powerful suite of mission-specific AI modules
- Cursor on Target network communication (CoT)

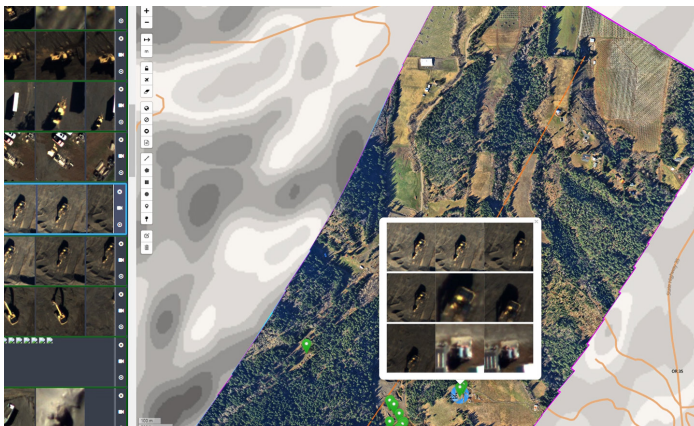
Applications and use cases: Automated fire mapping, tactical intelligence, border security, search and rescue, automated change detection, custom object detection, flood mapping, oil spill mapping, 3D modeling, infrastructure inspection, ISR, vegetation analysis and MORE.



Browser-based UI is plug-and play and enables complete system operation with as little as a laptop or tablet.

BASIC SPECIFICATIONS

Size 28 x 28 x 20.5 cm	Weight 5 kg	Power 50w average	GEOLOCATION GPS + on board IMU	Connection Ethernet 1 GBPS	Mounting Customized to host aircraft	Control Browser-based hosted on payload	Data Storage 1 TB internal SSD 1 TB removable SSD	Cameras RGB, NIR, LWIR



Example Flight Profiles

Flight Altitude	2,500' AGL	12,500' AGL
Aircraft speed	80kts	150kts
Image GSD: RGB, NIR	2.1" / 5.3 cm	10.4" / 26.4 cm
Image GSD: LWIR	10" / 25.4 cm	49.9" / 126.7 cm
Swath Width	2,040' / 621.8 m	16,197' / 4,936.8 m
Coverage Per hour	~ 16,120 acres/hr ~ 65.2 sq km/hr	~ 240,060 acres/hr ~ 971.5 sq km/hr



OVERWATCH
IMAGING

Automated Imaging Solutions
for Time-Critical Missions
in Challenging Environments