# PT-6

## Automated Maritime Wide-Area Search for Integrator

*Search, interrogate, prosecute— from one long endurance platform*

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## KEY FEATURES & BENEFITS

### Automated wide-area search

- Scans wide areas for objects of interest, processes imagery on the edge, and provides real-time information to operators, networked payload, or mission management system.

- Designate automated search areas and detection thresholds based on mission parameters to optimize sensor/software operation.

### Increased field of view

Automatically scans in a step-stare pattern that sweeps across the flight track to provide significantly increased search coverage area.

### Day and night search

Equipped with HD RGB and HD LWIR sensors. Nighttime heat/object detections, particularly in maritime environments, are aided by the contrast of thermal signatures against a uniform body of water.

### Improved operator efficiency

PT-6 automates the labor-intensive role of searching for small targets of interest in large areas, often in challenging conditions.

### Multi-mission capabilities

Enables a wide variety of mission capabilities, from maritime search and ISR to land-based tactical intelligence, inspection and mapping, custom object detection, change detection, and more.

### The most versatile UAS in its class

Integrator offers 24+ hours of endurance and is designed to easily integrate modular, field-swappable, multi-INT payloads (up to 40 pounds across six bays) with plenty of onboard power to spare.

**PT-6 with Integrator is a comprehensive smart sensor solution that combines state-of-the-art, automated wide-area search capabilities with high-powered zoom optics, across multiple spectral bands—all on a long-endurance platform that delivers unparalleled, around-the-clock maritime ISR capabilities.**

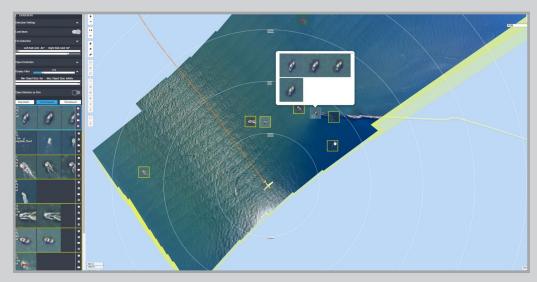| 30 YEARS OPERATIONAL EXPERIENCE | 1.5 MILLION FLIGHT HOURS | GLOBAL OPERATIONS | SYSTEM MODULARITY | SERVICES, ACQUISITION AND FMS |
|---|---|---|---|---|

**LEARN MORE | Contact us at solutions@insitu.com**

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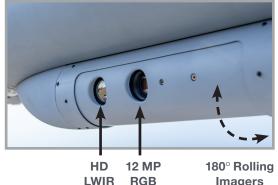*Versatile, smart sensor designed to meet ISR mission demands*

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**Overwatch AI software automatically controls sensor operation to continually scan a search area; processes data in real-time on the edge; and notifies the operator or networked payload with geolocated image data of detected objects that warrant further review.**

### PAYLOAD SWAP:

- Size: 23.6 in x 3.75 in (95 mm x 600 mm)
- Weight: 5.5 lb (2.5 kg)
- Power: 42 W

**MOUNTING:** Standard CG bay mounting

### ONBOARD SENSORS:

- Sensor 1: RGB Color
  - 12.3 MP (4096 x 3000)
  - Rolling shutter
- Sensor 2: HD LWIR
  - 1.3 MP (1280 x 1024)
  - 8-14 micron

**COMMAND CONTROL:** Ethernet

**USER INTERFACE:** Browser-based, hosted on payload

### GPS INS:

- Novatel survey-grade GPS
- Single L1 antenna

**STABILIZATION:** Active roll

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### PT-6 DETECTION RANGES AND COVERAGE EXAMPLES (*Assumes 55 kts)

| Target Size | Altitude (AGL) | Detection Range | Search Swath | Coverage Rate (per hour) |
|---|---|---|---|---|
| **2 m life raft** | 1000 ft (305 m) | 2 NM (3.7 km) | 4 NM (7 km) | 220 NM² (755 km²) |
| **19 m vessel** | 5000 ft (1500 m) | 10 NM (18.5 km) | 20 NM (37 km) | 1100 NM² (3773 km²) |
| **50+ m vessel** | 5000 ft (1500 m) | 17 NM (31.5 km) | 34 NM (63 km) | 1870 NM² (6414 km²) |



HD LWIR          12 MP RGB Color          180° Rolling Imagers

**OVERWATCH IMAGING**

*PT-6 is developed and produced by Overwatch Imaging*

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