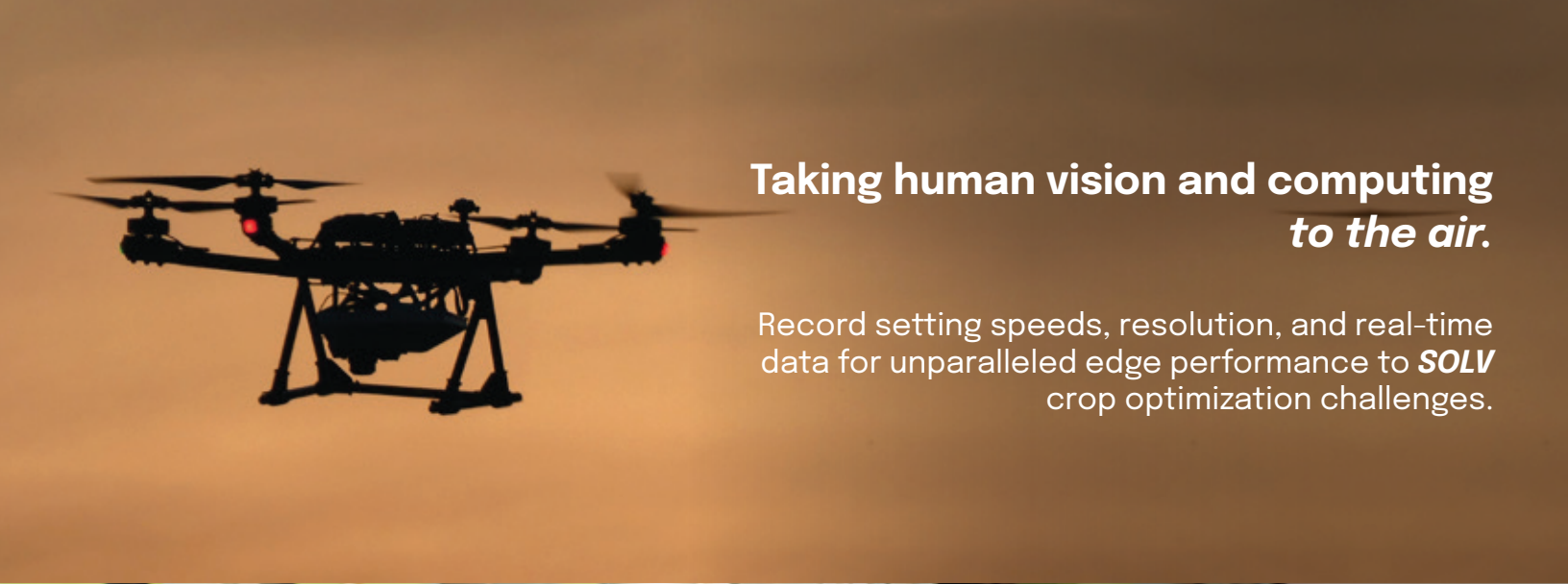




 **PRECISION AI**

**SOLV**<sup>TM</sup>

Your **AI** in the **SKY**



## Taking human vision and computing *to the air.*

Record setting speeds, resolution, and real-time data for unparalleled edge performance to **SOLV** crop optimization challenges.



## Artificial intelligence on-board

Real-time data delivery and insights are ready as soon as you land



## Nothing goes unseen

0.5 mm resolution for pixel perfect GPS targets and optimal chemical savings



## Lightning fast for scalability

High speeds beyond 50 mph for any size operation



## Relax, we've got it covered

Season long utilization for intelligent decision making throughout the year. Crop monitoring becomes automated with **SOLV**



## Easy to operate

Autonomous flights and data outputs for easy transfers and field use for customers and employees

# SOLV™ payload by Precision AI



## What's in the box

**SOLV™ payload** for a multirotor platform

**SOLV™ ground control radio box**

**SOLV™ software and annual subscriptions**  
integrated with web-central software

**Tripod and transportation case**

## SOLV-Ag capabilities

- Pixel level detection on every acre
- Broad acre crop models, such as corn and soybeans
- GPS coordinate outputs for Rx control or classifications
- Custom ML model deployment (optional)

## Precision AI advantage

### Precision connectivity

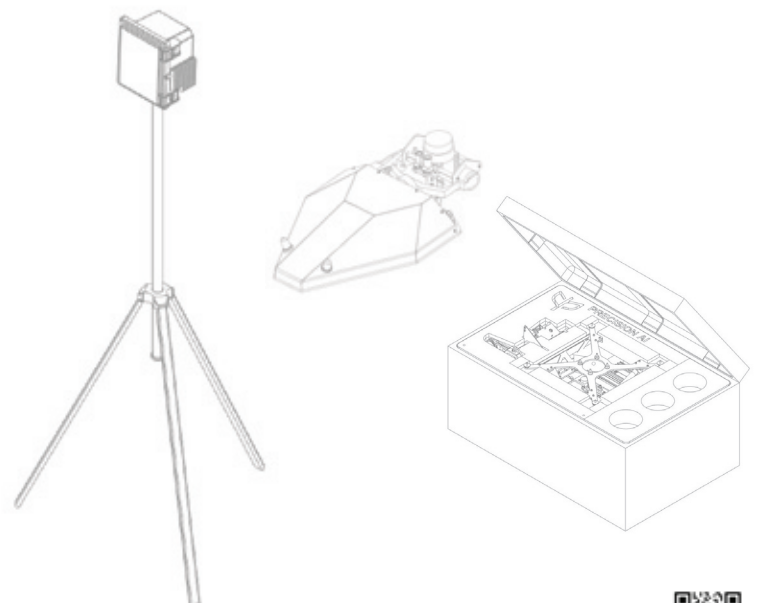
- Real-time data and telemetry streaming to field-edge devices
- BVLOS operations capable (67+ miles)
- 4G / 5G / Wifi / Satcomm for data delivery

### Precision images

- 25MP, global shutter, noise reduction, and color correction capable of running at 100fps with 38X Zoom
- 0.5mm/pixel GSD at 24.6 ft (7.5 m) AGL

### Precision security

- Default settings mean no shared data
- Authentication and authorization
- 256 bit AES encryption flight radios
- NDAA compliant



# Technical specifications

## Payload

- Satellite navigation (RTK): GPS, GLONASS, Galileo, BeiDou
- Real-time data and telemetry streaming to field-edge on ISM bands (2.4GHz)
- BVLOS operations capable: 67+ miles (100+ km)
- 1080p, 30fps live streaming (H.264, H.265) using AES 256 encryption
- Weight: 12 lbs (5.44 kg) payload + 2.6 lbs (1.2 kg) landing gear
- Camera stabilization: 6-axis IMU, barometer, lidar
- Gimbal tilt range: +/- 45 degrees
- Imaging sensor: 25 MP CMOS, 100fps
- Horizontal field of view (HFOV): 20 degrees
- Zoom: 38X
- Image resolution: 0.5 mm/pixel GSD at 24.6 ft (7.5 m) AGL

## Ground radio box

- Seamless 4G/5G/Wifi/Satcomm connectivity
- Weight: 14.2 lbs (6.4 kg)
- 5/8-11 thread to tripod - modifications available
- UPS: 30-min unplugged power for interruptions without mission failure

## Data delivery

- GIS image format: GeoTIFF
- Weedmap: GPS centroid and polygons available in several database options including shapefiles
- PAI auto-generated report: Full field segmentation image & 6-high resolution comparison between image and segmented image
- Down-sampled images available for faster upload for customer or employee referencing
- USB output size: 2 TB or 4 TB

## System environmentals

- Max operating temperature: 14F to 95F (-10C to +35C)
- IP43 tested: dust and rain resistant

## Drone

- Not included in purchase. SOLV payload optimized for a UAV with the following specifications:
  - Size folded: 34 inch (877 mm diameter)
  - Size unfolded: 89.5 inch (2273 mm diameter)
  - Height: 15.2362 inch (387 mm)
  - Weight: 55 lbs (25 kg)
  - Ready to fly in 3 minutes
  - Maximum flight time: 12 minutes
  - Maximum horizontal speed: 38 mph (17m/s)
  - Maximum wind resistance: 20 mph (8.9m/s)
  - Max propeller speeds: 6,000 rpm
  - Flight plan: multiple waypoints and points of interest
  - Smart RTH: customizable return altitude

