



## FAA & EASA APPROVED

The Recon-XL is STC'd and EASA approved for installation on Cessna 172s, Cessna 182s and Cessna 206s

## ABOUT US

Eagle Pods is a division of Eagle Eye Photography, a full service aerial imagery company that has been serving the Midwestern United States since 1993. Eagle Pods produces a variety of camera pods for fixed wing manned aircraft that are used in a variety of industries. Our customers include new networks, law enforcement, utility companies, survey companies, DNR, Film studios and oil and gas companies. Contact us with any questions or for a quote.



For more information, visit our website or contact us.

[james@eagle-pod.com](mailto:james@eagle-pod.com)  
[www.eagle-pod.com](http://www.eagle-pod.com)  
Buffalo, MN  
612-229-5027

## RECON-XL CAMERA POD



Introducing the Recon-XL camera pod. The ultimate low cost aerial mapping solution. The Recon-XL quickly turns any Cessna like this into an aerial mapping powerhouse. Its a multi pay load solution designed to house a variety of sensors depending on your needs. The Recon-XL allows you to build the system you need to meet the demands of your clients.



## MULTI-PAYLOAD SOLUTION

The Recon-XL can easily house sensors in the oblique or nadir orientation. Anti vibration mounts are customized for the weight and center of gravity for your payload ensuring clear and crisp images. It can house cameras such as:

- DSLR cameras
- Mirrorless cameras
- Hasselblad A6D
- Phase One iXM cameras
- Multi spectral cameras such as the Phase One 4 Band RGB and NIR LiDAR scanners
- And virtually any other sensor that can fit inside the pod.

## WIRELESSLY CONTROLLED

The Recon-XL is battery powered and wirelessly controlled from the cabin of the aircraft. A built in Intel NUC PC gives users have full access to the camera and the flight management system. A wireless mouse, wireless keyboard and wireless video monitor gives users full control of all parameters during the flight.

## FLIGHT MANAGEMENT SYSTEMS

- The Recon-XL allows users to use the Flight Management Systems made by:
- Field of View LLC
  - Phase One

## CUSTOM PAYLOADS

The Recon-XL was designed for payload flexibility. If you'd like a custom mounting system for your sensor please let us know.

## IPAD FOR NAVIGATION

Flight lines can be flown using an iPad for navigation eliminating the need for expensive mapping flight management systems. Simply upload the flight lines into ForeFlight and trigger the intervalometer at the beginning and end of each flight line.

## INSTALLATION

Installing the Recon-XL is easy and takes only minutes. Per the STC, a quick test flight is required to record any unusual flight characteristics. An updated weight and balance form and logbook entry is required by a mechanic. After this pilots are authorized to install or remove the camera pod without a mechanic using an optional dovetail quick release mechanism. For larger payloads which require more power or data cables, wires can be routed from the pod to the cabin of the aircraft. This simply requires a mechanic to install the wires and complete a 337 for a field approval. Phase One 4 Band RGB and NIR LiDAR scanners and virtually any other sensor that can fit inside the pod.

## GEO TAGGING SYSTEM

The Recon-XL comes with an integrated survey grade geotagging system which logs the latitude and longitude of each image. This system is made by Field of View LLC. This system captures the precise camera location at the instant of image exposure. Using the Atlas H-10 constellation it produces sub 10cm level accuracy. This eliminates the need for ground control control points when producing orthomosaic maps or digital elevation models. (note a subscription is required for the Atlas global correction service) Camera triggering can be controlled with an intervalometer, set according to the mission profile or with the mini PC.

## INTERNAL MEASUREMENT UNIT

Orthomosaics and DEMs can be accomplished using software such as Agisoft Metashape without the need for an expensive IMU. This is based on pixel recognition from image to image rather than pointing data. (The software calculates camera position). If your project requires an IMU please contact us.

## PHOENIX LIDAR SYSTEM'S RANGER-XL

The Recon-XL can also house Phoenix LiDAR System's Ranger XL. This is the ultimate corridor mapping system perfectly suited for high accuracy projects. This system uses a high point cloud density laser scanner, a fiber optic gyro IMU and an optional Phase One camera system for highly accurate mapping. Using a Riegl laser scanner with a 75 degree field of view and an extremely fast data acquisition rate of up to 1.8 megahertz, operators can quickly cover tens of thousands of acres per day. This system uses their proprietary software to plan on fly the mission, requiring cables to be routed from the cabin to the camera pod.

