

AMP1

High resolution gyrostabilized aerial mapping payload for various photography and mapping applications.

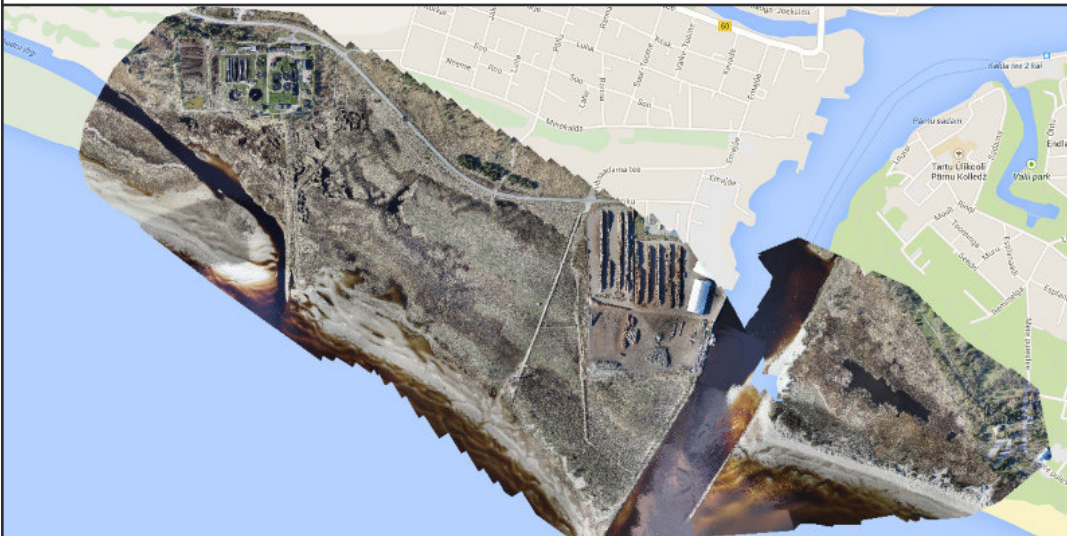
Key features:

- High resolution geo referenced still images
- Selection of best cameras and lenses
- Operations made simple using our bespoke software
- Compatible with most stitching programs and photogrammetry software

Threod Systems Aerial Mapping Payload allows running high precision mapping tasks with mini-UAV or multirotor drones. Payload is plug-and-play solution while integrated to Threods' aerial vehicles and autopilot.

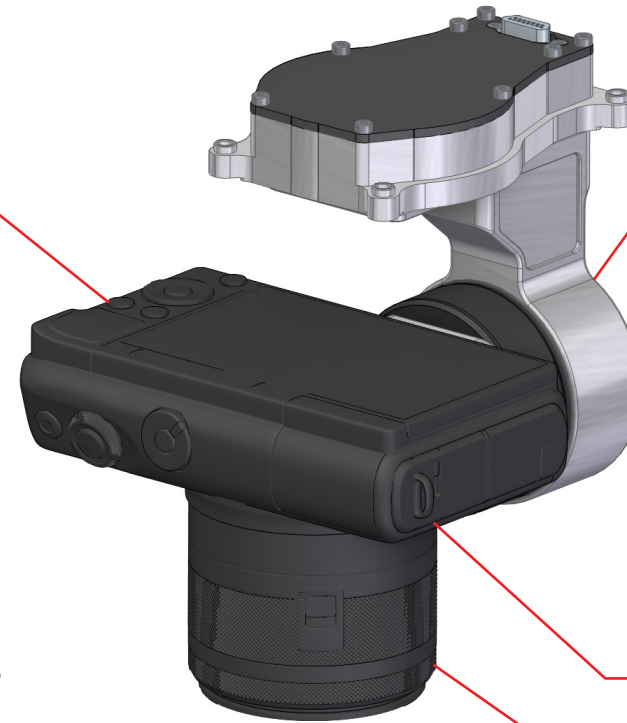
Ground Control Station user interface allows autonomous flight pattern creation by drawing a box over the target area. System calculates the best altitude, speed, mapping density according to the user requirements.

User interface allows easy image extraction of the specific area of interest by selecting an area on the map. That allows fast working cycle, if immediate image extraction is needed – no need to wait until full image merge.



On-board storage

Gyro stabilised sensor mount



24MP CMOS sensor

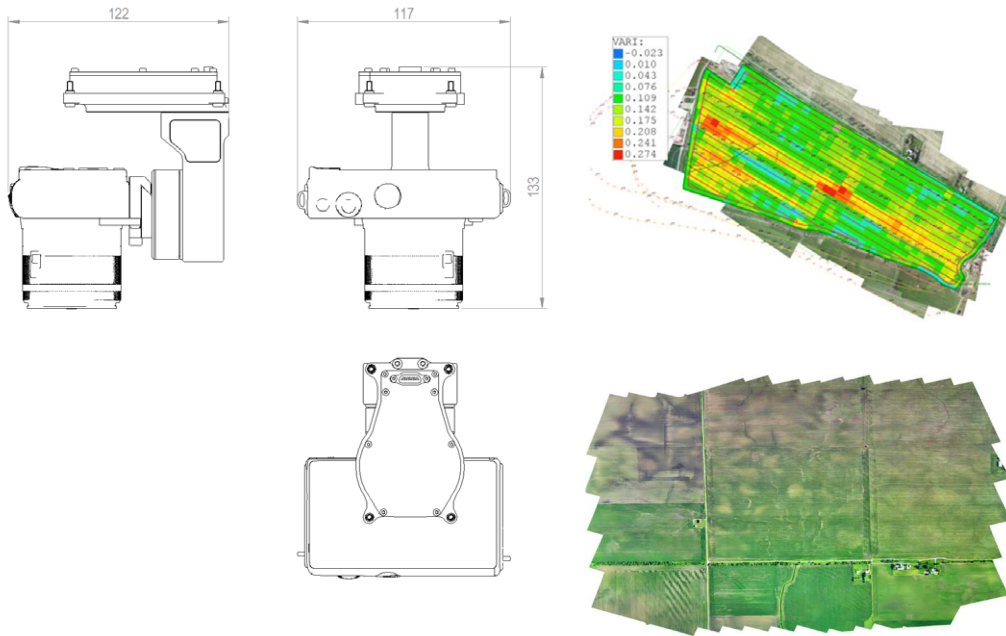
Many lenses available



Altitude (m)	GSD (cm/pix)
100	0,82
200	1,64
300	2,46
400	3,28
500	4,1
600	4,9
700	5,75
800	6,57
900	7,39
1000	8,22

AMP1 Specifications

Standard 24MP CMOS camera configuration



Mirrorless Digital Camera	
Sensor Type	CMOS*
Resolution	6000 x 4000*
Effective Pixels	24 megapixels*
Sensor Size	APS-C (22.3 x 14.9 mm)*
Lens Type	Manual Zoom Lens*
Lens Control	Manual and Automatic Focusing*
Focal Length	15-45mm *
Lens Aperture	F3.5-6.3 *
Output Image Formats	JPEG, RAW*
Dimensions	
Weight	1 kg *
Dimensions	120 x 115 x 135mm (W x L x H) *
Electrical	
Supply Voltage	18-30 VDC
Power Consumption	10 W nominal
Interfaces	
Control Interface	Ethernet
Environmental	
Operating Temperature	0°C to +40 °C (can be extended)
Altitude	5000 m / 16000 ft AMSL
Airspeed tolerance	100 km/h / 54 KTS
Features	
Georeferenced imagery	
Image mosaicking and stitching with third-party photogrammetry software	
Camera control and live snapshot download in GCS software	
Automatic metadata file generation for photogrammetry software ingestion	
Options	
Vibration Dampener	Custom designs available per platform
Gimbal Retract	Custom designs with built-in dampening available
* - standard camera and lens configuration	

Note! AMP1 has multiple sensor, software and packaging configurations. Contact Thread Systems for available options and quotations.

