



Compact Aerial Photography System

Specification March 2014

	Ready to Fly Aerial Photo System	Kit Configuration/Set
Ellipsoid size:	2.8 x 2.8 x 1.9 m	Yes
Volume:	8 m ³	Yes
Lift capacity:	Up to 600 g with at least 3 kg for line tension and stability	Yes
Envelope material:	Polyurethane 100 microns UK or USA imported film – Top quality	Yes
Envelope Assembly technology:	Special polyurethane elastic adhesiv, thermal and double welded. 12 ellipsoid parts for smooth shape.	Yes
Maximum helium loss:	0.3 % per day max on total volume	Yes
Stabilization sail:	2.5 m ² 50% permeable Till for in air stability and in wind positioning. Velcro attachment system.	Yes
Attachment:	5 main attachments on the Ellipsoid and 2 attachments for the Camera rig	Yes
Sail attachment system:	Velcro attachment system.	Yes
Valve:	Built in low ballon area – 2 stage valve	Yes
Logo possibilities - Optional:	With elastic banner films (cutter) or printed on vinyl sticker on 2 sides	Yes - Optional
Camera rig:	8 mm Aluminum T shape as a link between the Balloon and gimbal and main line	Yes
Main line:	Kevlar 2.5 mm 150 m. 400 kg tested break force.	Yes
Mechanical Camera Gimbal:	Pan 375 degrees, Tilt 120 degrees, Shoot Servo, Zoom servo. Central X axis mechanically gyro stabilized.	/
Pan Gear reduction:	5:1 plastic gear reduction	/
Gimbal Central axis:	8mm aluminum road with double ballbearings	/
Camera and lences weight:	For Cameras up to 1.5 kg	/
Gyro stabilized gimbal - Optional:	Pan and Tilt Gyro stabilized - Arduino	/
Filling hose:	1.5 m filling hose with special plastic adapter for the valve	Yes
Safety/Park line:	5 m 2 mm polyester line with aluminum hook	Yes
Digital charger:	Included	/
Battery:	3000 mAh 11.1 V for the Camera gimbal and 5.8 GHz video sender.	/
Flight autonomy:	120 to 180 minutes. Lower the balloon change the battery and go again with same autonomy.	
RC System:	6 channels minimum 2.4 GHz receiver/sender Spektrum, Graupner or Futaba	/
Wireless Video:	5.8 GHz 1000 mW 8 channels selectable. Attached to the Video Out or HDMI of the camera or. Range 500 m minimum.	/
Ground preview unit:	Plastic case. 8 inch color monitor, 7.5 A Pb high capacity battery, wireless 5.8 GHz receiver 8 channels selectable. Autonomy 5 to 6 hours minimum.	/
Safety Valve - Optional:	RC controled safety valve on top of the Blimp for emergency helium release	Yes - Optional
RC setting:	All the RC controls are set and tested in our workshop including the special channel for the Safety valve wich is protected against accidental opening	We instal the RC Safety valve in the envelope. The RC and the RC setting are not included.
Controls:	Pan/Tilt/Zoom/Shoot controls on the RC easy to	/

	use and master	
Repair Kit	0.5 m2 of Polyurethane film same as the envelope and polyurethane glue	/

The above specification is for the **Ready to fly** ordered Compact Aerial Photography Systems. In other words it is a fully functional Compact Aerial Photography System that just need the camera and helium container which is purchased locally. **Kit configuration/Set** has most of the above components (key components) except the electronics as shown in the above table. Production time for a Compact Aerial Photography Systems- Ready to Fly or Kit configuration – is 15 to 20 days. The specification for the electronics components is subject to change depending on the available provider but do not affects the end quality of the blimp in any way. The envelope is tested 24 hours under high air pressure after completion and the electronics are at least tested 1 hour in all working regimes.

For Aero Drum Ltd – Mr. Alexander Mijatovic – March 2014

