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Aero Drum Ltd
Est. 2002.

12 m OUTDOOR RC Blimp

Specification September 2015

	Ready to Fly (Completely Finished)	Kit Configuration / Set
Size:	12 x 2.1 m	Yes
Volume:	28 m3	Yes
Lift capacity:	5 kg +	Yes
Envelope material:	Polyurethane 125 microns USA or UK imported film	Yes
Envelope assembly technology:	Special polyurethane elastic adhesive, thermal and double welded	Yes
Maximum helium loss:	0.3 % per day max on total volume	Yes
Fins:	4 fins with ailerons	Yes
Fins material:	Balsa, Styrofoam, Ultracote composite, Elastic adhesive films, servo in inch fin in pairs - set to work in same direction (2 by 2), 4 servos in total	Yes
Fins attachment system:	Velcro base and Velcro tighten lines, Fins, ailerons and servos set as well as the harness system	Yes
Valve:	Built in the back – 2 stage valve	Yes
Logo possibilities:	With elastic banner films (cutter) or printed on vinyl sticker, 3D Styrofoam cut Logo, banners. Optional - setting of the Velcro bases for the printed banners on the envelope	Yes – Optional
Main motors holders:	2 carbon composite holders on sides at the horizontal axis. Attach system on aluminum rails with changeable position / gravity point. Built in 2 x 30 kg servos with aluminum gear reduction (5:1)on a rotating axis to allow 180 degrees turn able motors	Yes
Propeller:	2 x 22 x 14 inch carbon composite	/
Side motors holders attachment system:	Velcro and tightening lines / Aluminum tubes on separate attachments – rail system	Yes
Internal RGB light - Optional:	RGB Internal Led Light 5 m strip 2 x (Front and back) , 32 light combinations, Infra-Red remote/control, – 650 Euro	Yes - Optional
Motor:	2 x Gens ace Mars Brushless Motor 5943 215KV	/
ESC:	2 x 90 A	/
BEC:	5 A with separate Jumbo servo power supply	/
Servo for the main motors holder (Forward/UP/Down):	25to 30 kg Jumbo Servo	Yes
Back ESC (Left/Righ):	Brushless 30 to 40 A	/
Back Motor:	Brushless	/

Back propeller:	**50/50 % reverse**	**/**
Filling hose:	**2 m with special plastic adapter to the valve**	**Yes**
Safety line:	**5 m polyester line with aluminum hook**	**Yes**
Digital charger:	**Included**	**/**
Battery:	**2 x 10000 mAh 10S 37 V (each main motor 1 battery)** **1 x 6000 mAh 3S 11.1 V for the main receiver**	**/**
RC:	**Futaba 14 SC 14-channel 2.4 GHz Computer system**	**/**
Flight autonomy:	**50 to 70 minutes depending on the piloting style**	**Yes**
Wind:	**On winds up to 18 km/h and wind gusts up to 22-25 km/h**	**Yes**
Dropping mechanism – Optional:	**8 kg servo and mechanical system – 100 Euro**	**Yes – Optional**
Rail System:	**Special rail system originally developed to attach the motor holders and additional payload as gimbal for camera or other sensing equipment. This system allows moveable motor holders and payload to set it in the exact gravity center of the RC Blimp.** **1.5 m rail system for the side motor holders** **3 m rail system for the payload**	**Yes**
Safety valve - Optional:	**2 x RC Safety valve on top of the blimp for emergency helium release – 450 Euro**	**Yes – Optional**
Balance pockets:	**Rough balance pockets on the front and back. Fine side balance pockets on the front and back sides (4x)**	**Yes**
RC setting:	**All the systems and subsystems are tested and verified in the workshop previous to packing and transport**	**/**
Receivers:	**4 x synchronized.** **1 x main, 2 x on the side motors and 1 x for the back motor and ailerons**	**/**
Tested control systems and surfaces – double control system:	**All the controls are double. Up (main motors and Back horizontal ailerons), Down (main motors and Back horizontal ailerons), Left (main motors and Back vertical ailerons), Right (main motors and Back vertical ailerons)**	**/**
Repair Kit:	**0.5 m2 of Polyurethane film same as the envelope and polyurethane glue**	**Yes**

The above specification is for the **Ready to fly** ordered RC Blimps. In other words it is a fully functional RC Blimp that just need 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 12 m Outdoor RC Blimp - **Ready to Fly or Kit configuration** - is 30 to 35 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 first air inflation. The electronics are at least tested 1 hour in all working regimes.

For Aero Drum Ltd – Mr. Alexander Mijatovic – September 2015