

## 2<sup>nd</sup> GENERATION

LIGHTNESS COMFORT
3 D A E R O S P A C E S P O R T

SYSTEM BRO NOMICS PREPREG
PROTECTIONS OLIDITY

PILOTAGE DESIGNAUTO
CARBONDES GNAUTO
CARBOND



#### INFLIGHT COMFORT

The new frame geometry, with higher and further forward swing arm rotational axis, compared to the previous generation, ensures great pitch stability.

**Inflight comfort** is also ensured by two titanium «comfort tubes» which keep the harness in **optimal position**.

This assembly, coupled with the mobile swing arm bars, generate a slight gap between the harness and the chassis **eliminating all vibrations**, **compensating the torque effect** and keeping an **optimal** propeller's angle. All this ensures an increased sensitivity and **piloting pleasure** (especially with the "3D system" activated).

The ergonomics of the new frame have been further improved thanks to the new positioning of the two switches (main on/off and primer) which are now lateral in the frame and therefore more easily accessible.

### PLUMASWING ARM BARS

The carbon swing arms (option) are manufactured using the same technology as the chassis with unidirectional high-performance carbon fiber applications, for a maximum strength and safety. The fixing on the chassis is assured by an uniball (on standard stainless swing arms as well) drowned on the swing arm bars, the same process used for fixing the carbon suspensions arms on the racing cars' monocoques.

The second-generation arms allow a wider range of adjustment, with three hooking positions (two on the old version) for the glider.

#### COMFORT OR DYNAMIC SPORT MODE

The Uniball junction exclusively allows to propose the "Adventure 3D system", where the lateral swing arm bars movement can be locked or unlocked. Locked position: Comfort Mode, recommended for novice pilots. Unlocked position: Dynamic Sport Mode for more dynamic piloting, which allows for active piloting with the harness, enabling the true potential of the paramotoring wing.

#### **EFFECTIVE TORQUE COMPENSATION**

A unique and effective system to compensate the torque effect consists in the asymmetric set-up of the 3D system.

By simply setting in "racing" mode the right arm only, for counter clockwise propeller rotation (Moster), or the left one for clockwise rotation (Thor & Atom).

The harness lateral settings also allow a fine calibration of the anti-torque and perfectly adapted to each pilot requirements.



## PLUMACHASSIS





Chassis, swing arms and cage from 2,65 kg (5.85 lbs)\* only!

Manufactured with technologies used by the aerospace industry, using high-performance CNC-cut Prepreg (pre-impregnated) carbon fibre processed in an autoclave for a guarantee of quality and strength.

The «Pluma» has passed the resistance test (EAPR) at **15G** for a pilot weight of 125 kg (275 lbs).

\*Depending on options.

#### **ACTIVE AND PASSIVE SAFETY**

The frame has been designed to **protect the pilot** in the event of a crash, in order to avoid deformations which could hurt the back of the pilot (as might occur with a tubular frame).

The unidirectional «prepreg» carbon fabric used in the frame (especially in the base) and in the arms, allows longitudinal deformations creating elasticity in order to absorb shocks and also prevent breakages.

Only the "autoclave" technology allows this style of manufacturing. Thanks to this technological choice and many years of market experience, we have access to parameters that are unique on the market.

For beginner pilots an extra protection « bumper » is also available..

A **Kevlar** layer (tear-resistant material) is integrated in the chassis as an additional dorsal protection for the pilot.

On all our harnesses an **airbag** is available as an option to further protect the pilot's body.





# PLUMA HARNESS

**Light harness**Aluminium cage (standard)





#### SAFETY AND SETTINGS

We remind the importance of the **belly strap settings**, that in free flight is adjusted between 40cm and 46cm (15,7 and 18,1 inch) depending on the pilot's weight and the glider's size to have it conforms to the EN flights tests standards.

Once tight, the pilot movements are damped (weight shift) during turbulence and when it is loose (with two arms in 3D mode), it allows easier weight shift support to compensate the engine torque. The setting of this strap is therefore essential.







### PLUMACAGE

The glider inflation becomes easier thanks to the new design of the cages junction pieces, which allow the glider lines to go up along the cage without obstacles, even for the smallest pilots.

Cage Ø 142cm (aluminum, or carbon option) for 125 &130cm propellers XL option Ø 152cm (aluminum) available on Moster 140cm propeller Cage Ø 152cm (aluminum) on Thor 202 with its 130cm propeller.

Five shaped arcs and four lightweight and resistant carbon spokes allow the assembly easy and fast, the tension of the net is done in **one easy procedure**.



## PŁUMA TANK

Compact, lightweight tank with a capacity of **12 litres** (3,1 US gal), allowing to fly and take off with 1 litre (0,3 US gal) of fuel only.

Filling is even easier, the cap is fitted with a venting valve and the fuel supply is directly integrated into the tank.

## PLUMA AVAILABLE ENGINES

The chassis is designed to match the most popular engines on the market.

#### ATOM 80CC . . . . . . . . . . . . . . BY VITTORAZI

Very light engine. With a total weight of 18.9 kg (39,7 lbs), it is the lightest in the range. Manual starter and 16 HP, for any pilot up to 80 kg (177 lbs).

### MVL 125cc. . . . . . . . . . . . . . . by H&E

Motorization available with standard manual start (flash starter) and clutch. Easy to use, this engine will satisfy pilotes up to 90kg with its light weight and price.

#### MOSTER 185CC. . . . . . . . . . . . . . . BY VITTORAZI

MOSTER 185 PLUS version of the Italian best seller, with its clutch and manual starter. Options: electric starter (DUAL), and cooling carbon shroud. It is therefore both in a lighter basic configuration, as well as in the «full option» version, that it can deliver its thrust for pilots seeking for power.

#### 

**33horsepowerinjust16,8 Kgofweight.** The torque curve has been optimized at each engine speed to guarantee power and low consumption. The balancing counters haft and the powerful liquid cooling systemensure greater flight comfort and reliability. Cyril PLANTON is French Champion 2023 with his PLUMA THOR 202!

1,0 kg = 2,2 lbs

Thrust Pilot weight	125 cm	130 cm	140 cm
АТОМ 80	<i>55 kg</i> up to 80kg	7	
MVL 125	-/	66 <i>kg</i> 55 to 90kg	STEEL ST
MOSTER 185	A	78 kg 75kg to tandem	82 kg 75kg to tandem
FACTORY		90 kg 75kg to tandem	94 kg 75kg to tandem
THOR 202		<i>92 kg</i> 75kg to tandem	/



#### **BUMPER** extra protection

Accessory for beginners' pilots



#### **CARBON SWING ARMS**

Hi-tech option, tested at 15G, light & strong (- 330 g)



#### **FULL CARBON CAGE**

Dynamic and audacious look, solidity



#### **COMFORT HARNESS**

Cordura fabric and "air comfort" system (+ 600 g)



#### **MAYDAY PARACHUTE & CONTAINER**

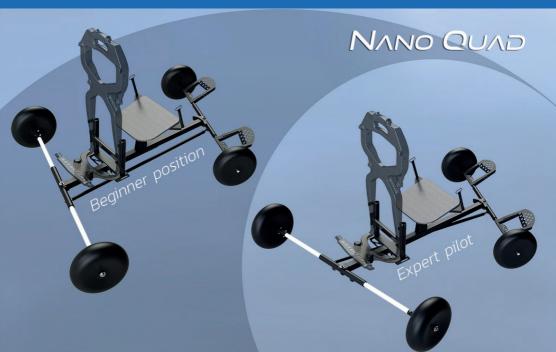
A complete range



#### AIR BAG

For more safety

## PLUMA ACCESSORY





36 Rue des Osiers 78310 Coignières

Tél: +33 (0)1 34 57 00 00 Fax: +33 (0)1 34 57 00 99

www.adventure.fr

2023/05/25