



# ***MINIPLANE***

**The first ITALIAN  
paramotors  
since 1989**

[best quality image](#)



[our engine](#)

## **TOP 80**



## ***The new generation of light-paramotors is born!***

### **OUR CONSTRUCTION PHILOSOPHY**

The increase in performance of modern paragliders makes it possible to fly with almost one-half the power of a few years ago.

A little two-stroke engine, built with modern technology, can offer more than enough reliable power and much less weight. This makes the critical take-off run easier and safer.

Our philosophy of a reliable Minimotor, combined with optimizing the resonance of the exhaust provides the pilot:

- Light weight
- Less weight in flight means a smaller, easier to inflate Paraglider

- Less vibration
- Easier to start
- Less fuel; less to carry
- Less weight means a lighter frame
- Less weight means running faster, more erect, and under control - not struggling with a heavy load

Following our philosophy of  
**SAFETY and RELIABILITY,**  
our engines come complete with:

### **CENTRIFUGAL FRICTION CLUTCH**

- At Idle the propeller does not turn (= no push)
- Easier starting the motor
- Easier to inflate the Paraglider without the back blast
- A normal pilot can start the motor, inflate the sail, and take-off alone
- Less torque on the pilot when accelerating or decelerating
- No risk of tearing apart your glider if you fail start and the paraglider falls over your head
- Easier to reverse inflate the Paraglider since a turning propeller has a gyroscopic effect which affects your equilibrium when turning into the wind
- No vibration waiting for take-off or during thermalling

### **LIGHTWEIGHT FRAME**

- Made of aluminum alloy and glass fiber, the best balance between weight and strength
- Easy and complete cage disassembling for convenient transportation

## PROTECTIVE CAGE

- Since the propeller does not turn at idle, a simpler and lighter cage can be used.
- Our aluminium and fiberglass cage is strong but flexible, so you can forget about cage replacement after a small mistake

## LARGE DIAMETER PROPELLER

- means more efficiency; optimized for ease of running and transport
- Less noise because the propeller turns slower
- Two blades also means you can put it in a sack and transport it with the Paraglider

## HARNESS

- our New **system PSF**, (no high or low connections) stabilizes the Paraglider, suppresses the gyroscopic effect of the motor and lets you fly "Actively"

since 1996 we invent this system, actually 80% of the manufacturers use a similar solution

- Unique front extensions for attaching the Paraglider
- provides greater safety in mishaps and a stable position during take-off, flight and landing.
- Tested by experienced pilots and schools



- Simple, requires no acrobatics to put on or adjust
- Comfortable, relaxed flight



## REDUCTION

- Miniplane introduces a geared reduction system
- minimizes size and weight
- The motor and the propeller turn in different directions reducing almost to Zero the torque during acceleration and deceleration
- extra long life

## STARTING THE MOTOR



- Self rewinding pull starter; Minimotor takes less power to pull start on the ground or in flight

Starts from the front and not the side. Hand moves away from the propeller and the other hand and your body holds the motor from moving.

*Starting a paramotor from the side has caused many accidents. When a motor does not start quickly, a common reaction is to give it more gas. When it does start it shoots forward since you cannot stop it from the side.*

NOTE : since the end of 1998 we stop the development of electric starter because the TOP 80 is VERY easy to start with manual starter.

## **GAS TANK**

- **Transparent and easy to fill**
- **Easy to remove and seal; no fumes in the car during transport**

## **ENGINE COOLING**

**Tough to cool an engine behind your back; two-stroke engines need to be reliably cooled**

- **TOP 80 Minimotor is AIR COOLED with a fan**
- **More power, less noise, reliable, constant power, less oil in mixture.**

## **THROTTLE CONTROL**

- **Light and simple, fits in your hand comfortably. Weight only 114 grams ! Easy to set for your size also with winter gloves.**
- **Is not possible to push the throttle control accidentally and suddenly accelerate the motor. This is a significant safety factor.**

## CARBURETOR

- Diaphragm-type; allows the engine to work in any position; petrol is not spilled, either during flight or transport. Easy to adjust.
- On request you can have a basin carburetor and a suction. It uses less fuel, optimized for competitions.

## OPTIONS

COMBINED [DIGITAL RPM AND TEMPERATURE GAUGE](#)  
(click on **strumenti** please)click on **strumenti** please)

reserve mounted on the chest

[transport box](#)

throttle control for left hand

click on **strumenti** please)



| <b>MINIPLANE</b> |    | <b>115</b>                           | <b>125</b>                  |
|------------------|----|--------------------------------------|-----------------------------|
| propeller        | cm | 2 blades 115                         | 2 blades 125                |
| empty weight     | Kg | 18,5 harness included                |                             |
| engine           |    | <b>TOP 80</b>                        |                             |
| carburetor       |    | Diaphragm Walbro, or basin Dell'Orto |                             |
| dimensions       | cm | 125 x 125 x 75                       | 135 x 135 x 75              |
|                  | cm | reducible to h 75 x 40 x 40          | reducible to h 80 x 40 x 40 |
| static thrust    | Kg | 47                                   | 52                          |
|                  |    |                                      |                             |

|  |       |                               |                   |
|--|-------|-------------------------------|-------------------|
| noise level                                | dB    |                               |                   |
| climb rate **                              | m/s   | 2,2                           | 2,5               |
| consumption in level flight **             | l / h | 2                             | < 2               |
| max. pilot weight                          | Kg    | 90                            | 110               |
| frame                                      |       | aluminum ergal and fiberglass |                   |
| fuel capacity                              | l     | 11,5                          | 11,5              |
| Range                                      |       | 3 Hours                       | more than 4 hours |
| ** with 75 kg pilot and performance glider |       |                               |                   |

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DON'T WAIT TRY THE REVOLUTIONARY

# MINIPLANE

The first really EASY TO USE

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[HOME ENGLISH](http://www.miniplane.com/inglese/miniplane.htm)