

GLIDING

International



**CHINA - FAST BECOMING A
FORCE TO BE RECKONED WITH**

We are the best at what we do !

A REAL 'CUTIE'

The Italian made (39:1) 13.5 m Electro Silent

The Silent 2 Targa Electro is now available with a nose-mounted electric propulsion system which has been produced specifically for the Silent. It will meet the demands in the market place for a moderately priced self launching 'fun machine.' The electric motor installed in the nose of the glider with folding propeller blades is almost aerodynamically clean with no additional drag during the climb or cruising flight.

With this configuration the glider requires less power, a more compact motor, and smaller batteries which means less weight and cost. The manufacturers claim it is the best technical compromise for a self-launcher in the new FAI 13.5 m class.

The aerodynamically efficient nose-mounted propulsion system allows sustained level flight for the sailplane to cruise at speeds of 150 km/h with minimal energy consumption.

Two lithium polymer (LiPo) battery packs with a combined capacity of 4.3 kWh provides the power. The battery packs, each weighing 15.5 kg (34.2 lbs), are positioned as close to the centre of gravity as possible. They are readily accessible and removable via an access panel on the upper surface of the fuselage.

The batteries are easily transportable allowing them to be charged at any location, not just on board the sailplane. You will get two self-launches from a full battery or an hour of cruising straight and level. The ex-factory cost of this sailplane is Eur 75,000.

Unlike NiCd or lead-acid batteries, LiPo batteries experience negligible loss of charge (typically 1% per month) when stored at ambient temperatures.

The usual batteries needed to power glider avionics are no longer necessary as the LiPo propulsion batteries have enough extra capacity for all on-board power requirements.

The life span of the batteries is estimated to be approximately 1,500 cycles to full discharge, after which the batteries are still capable of holding 70% to 80% of a full charge.

Recharging is performed with a 1,200 W external charger which includes a Battery Management System (BMS) designed specifically to balance the charging of LiPo batteries. During charging the BMS controls the voltage to the various cells that make up the battery packs so that their voltages are all within 0.01 volts.

