



ADVANCE IOTA Product presentation

IOTA – Easy Performance

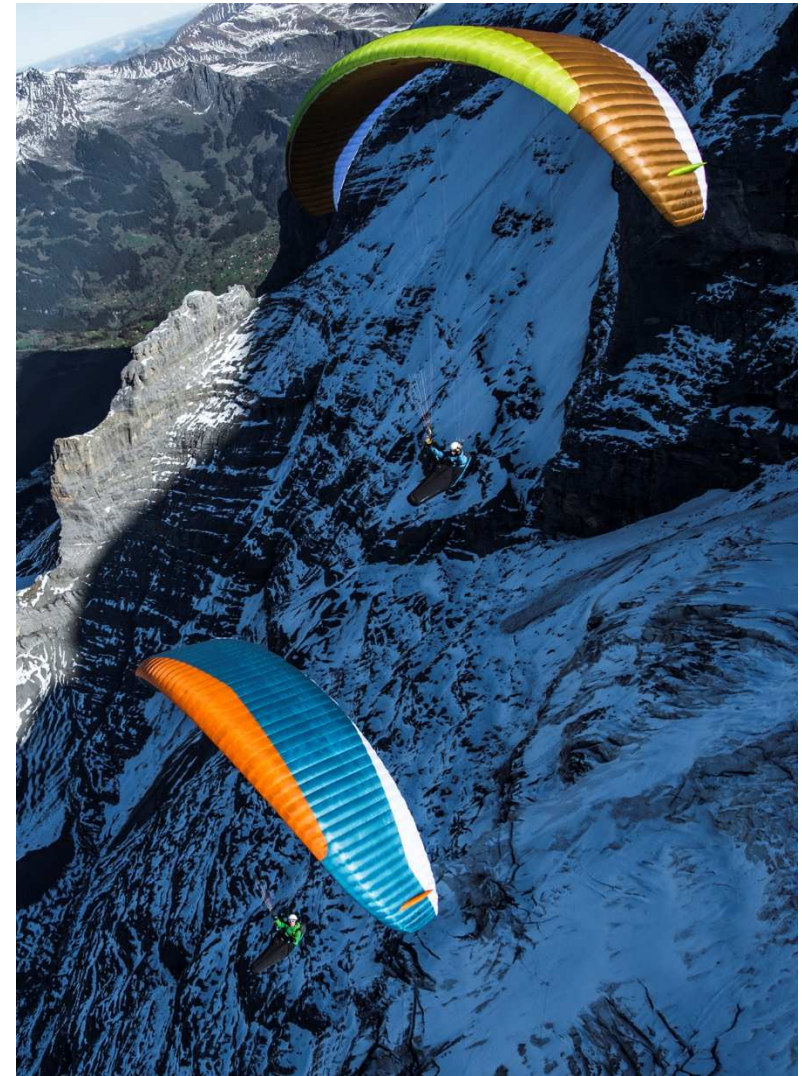
ADVANCE launches the new IOTA Series, a High-Level EN B glider for ambitious cross-country pilots. Featuring an optimized, low-weight design, the XC-Intermediate IOTA represents the most accommodating balance between performance and piloting ease within the entire ADVANCE product range. The high performance capabilities of the IOTA open the door to the world of long cross-country flights.

New Semi-Light Category

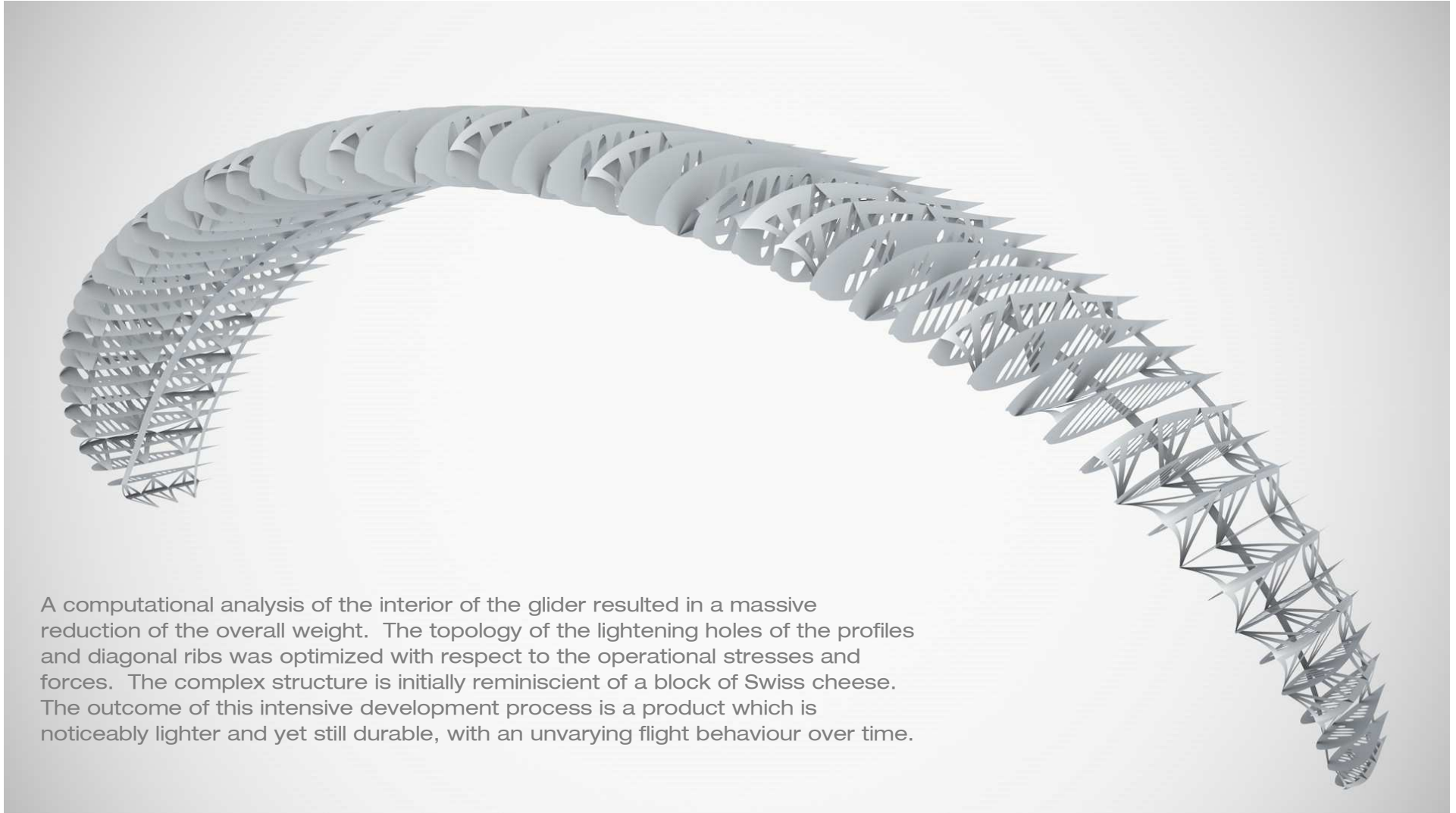
There is now a new category called “Semi-Light”. Thanks to computationally modelled lightweight-structure design techniques, the IOTA weighs only 4.45kg (23m² size). And yet the IOTA is a robust and durable product thanks to the material choice of Skytex 32g and 38g from Porcher Sport. The low weight of the canopy not only improves the start behaviour of the glider but also considerably increases its passive safety and contributes to its direct handling.

Exceptional passive safety

The IOTA features a very low minimum velocity. The stall point is clearly communicated to the pilot via the exceptionally progressive brake pressure. This is all the result of an optimal design of the inlet openings. The low weight canopy of the IOTA means a very low glider inertia, and the compact overall concept is a very reassuring aspect of the IOTA. All these factors contribute to the IOTA’s high level of safety.

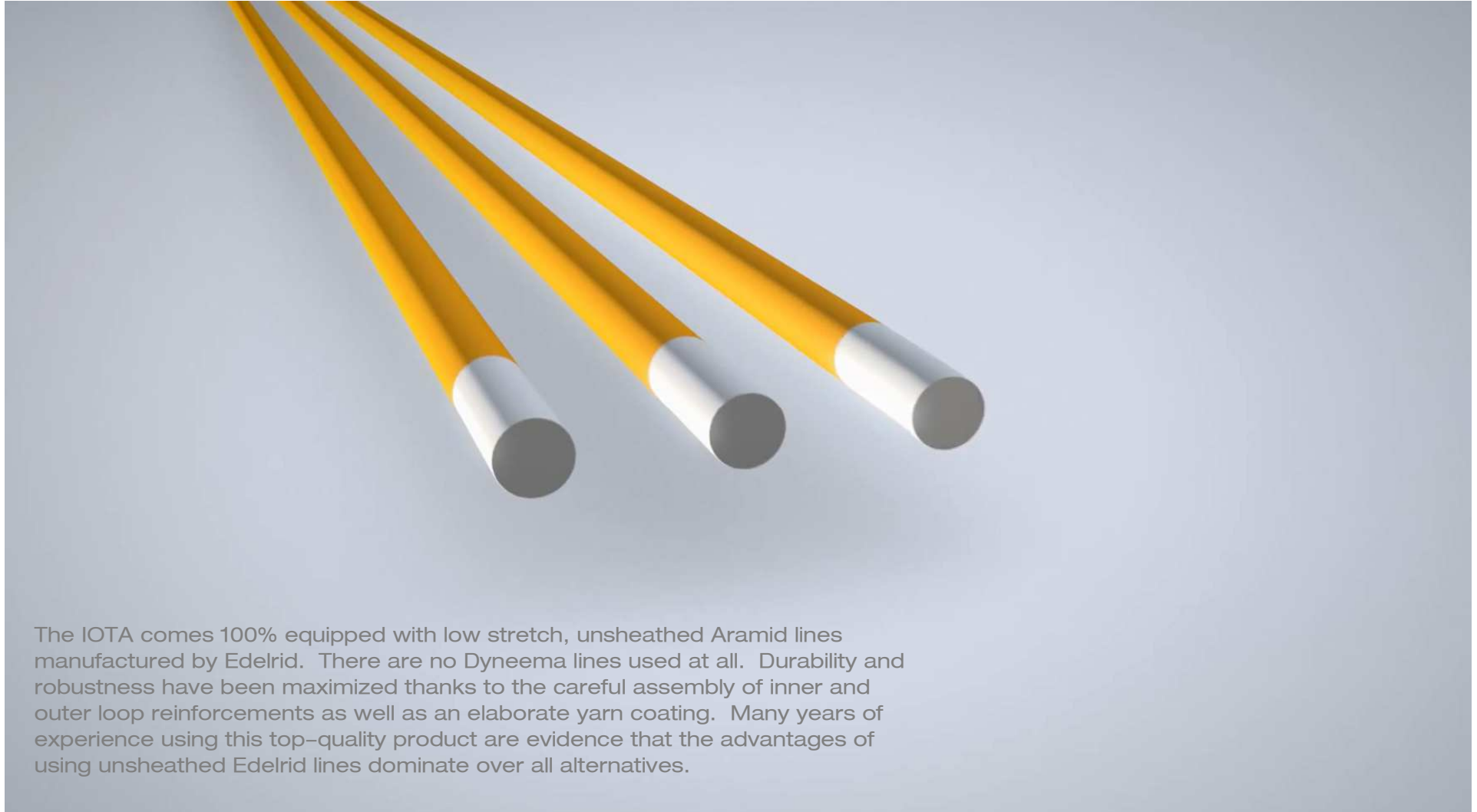


New Semi-Light Category



A computational analysis of the interior of the glider resulted in a massive reduction of the overall weight. The topology of the lightening holes of the profiles and diagonal ribs was optimized with respect to the operational stresses and forces. The complex structure is initially reminiscent of a block of Swiss cheese. The outcome of this intensive development process is a product which is noticeably lighter and yet still durable, with an unvarying flight behaviour over time.

100% Edelrid Aramid Lines



The IOTA comes 100% equipped with low stretch, unsheathed Aramid lines manufactured by Edelrid. There are no Dyneema lines used at all. Durability and robustness have been maximized thanks to the careful assembly of inner and outer loop reinforcements as well as an elaborate yarn coating. Many years of experience using this top-quality product are evidence that the advantages of using unsheathed Edelrid lines dominate over all alternatives.

Frequently Asked Questions

Where does the name IOTA come from?

Following the 25 year ADVANCE tradition of naming paragliders, our new High-Level EN B also gets its name from the Greek alphabet. The ι is alphabetically located between ϵ (Epsilon) and Σ (Sigma). This is also the logical placement of the IOTA within the ADVANCE product range as a High-Level B glider.

How is the IOTA positioned between the EPSILON and the SIGMA?

In terms of demands on the pilot, the IOTA is exactly between the EPSILON and the SIGMA. In terms of performance, the IOTA is actually quite close to the SIGMA 9. Within the ADVANCE product range the IOTA possesses the most well-balanced mix of performance and easy piloting. The sportier SIGMA is more dynamic and has a higher top speed. The entry-level to intermediate EPSILON 7 is more compact and easier to pilot.

Why are all of the lines on the IOTA unsheathed?

The unsheathed Aramid lines manufactured by Edelrid which we use on the IOTA have the same strength as sheathed Dyneema lines of the same diameter. Due to its large amount of stretchability, Dyneema has been excluded for quality reasons from use as main lines on all ADVANCE gliders. We have had a very good experience in recent years with Edelrid Aramid lines. Countless strength measurements performed during standard paraglider checks show that Aramid retains its strength even after very intensive usage. Aramid is a very robust material with a high UV resistance and high abrasion resistance. For instance, Aramid yarn gets coated with a "Double Nanocoating" before being braided. In addition, the braiding is very compact and smooth, which has positive consequences on its aerodynamic resistance. The loops in the line forks are outfitted with internal reinforcements for a

more durable contact pressure. Line loops which are attached directly on maillons are fitted with an additional outer protective cover.

Which harness is best for flying the IOTA?

The best harness for flying the IOTA is the new ADVANCE LIGHTNESS 2. Weighing in at 2.8kg, the LIGHTNESS is also an optimized low-weight product, and with its certified protector and integrated rescue, it fully fulfills its function as a harness. The mid-sized cross-country equipment, including glider and harness, weighs less than 10 kg total with this package. Being a pod harness, the LIGHTNESS 2 is not only very comfortable for long flights, but it is also very sleek and aerodynamic.

Why does the IOTA have no miniribs?

Several flight test comparisons demonstrated to us that miniribs on the IOTA presented no aerodynamic advantage over an equivalent construction without miniribs. Therefore we decided against including them in order to keep the canopy as light as possible.



Technical Data

IOTA		23	26	28	30
Flat surface	m ²	23	25	28	30
Projected surface	m ²	19.2	21.6	23.3	24.9
Recommended takeoff weight	kg	60 – 85	75 – 100	90 – 115	105 – 130
Glider weight	kg	4.45	4.85	5.15	5.45
Aspect ratio		5.5	5.5	5.5	5.5
Projected aspect ratio		3.9	3.9	3.9	3.9
Span	m	11.35	11.95	12.45	12.85
Projected span	m	8.65	9.15	9.45	9.75
Trim speed	km/h	38.5 (+/- 1)	38.5 (+/- 1)	38.5 (+/- 1)	38.5 (+/- 1)
Max. speed	km/h	53 (+/- 2)	53 (+/- 2)	53 (+/- 2)	53 (+/- 2)
Number of cells		59	59	59	59
Number of risers		3+1	3+1	3+1	3+1
Certification		EN/LTF B	EN/LTF B	EN/LTF B	EN/LTF B

Colour chart



lime



pacific



bordeaux



gold



bronze

Size chart

