# Product information

## Voronoï Carbon, black full protection, M, wide visor

Art.Nr.: FJ-F03251 / GTIN: 3666550302857 / manufacturer:

**1.040,00CHF**
incl. 8,1% VAT incl. Shipping
Delivery **Mon 09. Nov - Tue 10. Nov 2026**

Unparalleled Next-Generation Protection

The VORONOÏ CARBON is the riding helmet that combines the ultimate next-generation protection through a combination of carbon, in-mold construction of the inner shell, and temple protection.

Carbon: The outer shell of the VORONOÏ CARBON is made of carbon fiber, a high-tech material whose structure—composed of layers of interwoven fibers—offers exceptional impact resistance.

In-Molding: The inner shell is encased in a polycarbonate layer, creating an additional protective barrier between the outer shell and the EPS shell.

EPS Shell: The use of a carbon outer shell in combination with in-molding technology allows for the use of a highly absorbent, low-density EPS foam on the inside.

Temple protection: The VORONOÏ CARBON is the first equestrian helmet with temple protection (optional), which reduces the risk of concussions in the most vulnerable part of the skull.

Safety first.

Our desire to develop the first equestrian helmet offering better protection for the temple area stems from an observation: Every year in France, more than 150,000 head injuries require a visit to the emergency room, about a quarter of which are due to accidents during sports or leisure activities. These injuries result from the brain’s vulnerability and the fragility of the skull. The temple area accounts for about 80% of severe brain injuries.

Temporal protection reduces the risk of concussion in the most vulnerable part of the skull—the temporal region. In fact, the meningeal artery is located behind the temporal bone. Even the slightest trauma can damage this artery, cause a hematoma to form, and compress brain cells—which can lead to serious long-term effects or even death. The VORONOÏ CARBON helmet is the only one that takes the temporal region into account, absorbing and distributing the shock wave over a large area to reduce these risks.

# Product information

The protection against rotational impact—tested since the work of Working Group WG11 (Working Group 11)—is fully ensured even without artificial aids, whose purported benefits have never been proven by independent laboratories, including the Virginia Tech Lab.

### Safety, comfort, and lightness.

The inner shell of the VORONOÏ CARBON is made from one of the most impact-absorbent EPS (expanded polystyrene) foams on the market. An integrated rib (between the upper part of the outer shell and the lower temple section) reinforces the structure and provides compressive strength far exceeding industry standards.

FREEJUMP was inspired by technologies already used in bicycle and ski helmets, in which a polycarbonate layer is integrated directly over the EPS foam. This in-molding technology, combined with the carbon-fiber outer shell, provides exceptional impact resistance thanks to this three-layer construction.

The liner is made from high-quality Italian fabric to maximize comfort, breathability, and head support. It is removable for washing (wash at 30 °C/86 °F and air-dry) to ensure comfort and hygiene.

The VORONOÏ CARBON helmet is extremely lightweight and offers unparalleled comfort even during extended wear: +/- 500 g without the lower temple guard (with inlay and long visor), +/- 600 g with the lower temple guard.

### Design and Ventilation.

Inspired by the distinctive geometric pattern that gave the helmet its name, the two ventilation openings (at the front and back of the outer shell) are designed to optimize airflow, thereby enabling exceptional thermal regulation. The Voronoï pattern, with its irregular geometric cells, creates a unique and fascinating aesthetic reminiscent of a dragonfly's wings. Each cell of the Voronoï pattern is carefully positioned to ensure strength and maximize airflow through the helmet, thereby optimizing safety, ventilation, and breathability.

The inner shell of the VORONOÏ CARBON also features 20 ventilation openings that maximize airflow.

The inlay is equipped on the front with an ABS half-moon (attached to the leading edge of the inner shell), which features two openings to direct airflow into the helmet.

### Customization, Style, Size Selection.

The VORONOÏ CARBON is customizable. You can customize the shell, the liner, the ear loops, the ventilation slots and their grilles, as well as the visor, to reflect a unique style. The helmet is available with or without temple guards, the latter of which are removable and reattachable. For optimal protection—and to accommodate the upcoming Freejump Intercom by Cardo—it is recommended to choose the complete configuration (with temple guards). However, the temple guards can also be added later.

The VORONOI CARBON is available in three shell sizes (S, M, and L) and three colors (black carbon, blue carbon, and full black carbon).

The inlay is available in a wide range of sizes from 52 cm to 62 cm.