

AERO BIKES





The Orca Aero relies on truncated airfoil tube shapes to improve aerodynamics.

◀ **Orbea Orca Aero M10iTeam** MSRP: \$8,000 | **Weight:** 16.0 pounds | **Size:** 55cm

Distilled to its core, the Orca Aero is a sleek machine for flat, fast days. It makes an excellent addition to Orbea's growing arsenal of WorldTour-ready bikes. And the Orca Aero has a trick up its sleeve: It is one of the first bikes to be designed after the UCI discontinued its 3:1 rule (see page 42).

That rule dictated a frame's tube length could not be more than three times its width. Given the rule's departure, Orbea extended the Freeflow fork's blades, thereby making the fork more aerodynamic. Orbea says this change will save you four watts at 50kph. The change is subtle; the bike does not look radical in shape or design.

In fact, it's another great example of how road bike categories are blending. The Orca Aero would be a top contender for a sprint stage, but it won't be a disadvantage on the climbs. Yes, the bike is heavier than most climbing-specific bikes, but it remains respectably lively. On high-speed descents, its quick steering and overall stability are exceptional.

Beyond looks, Orbea is making some major aero claims: It says this bike saves 27 watts at 50kph—or 82 seconds—in a 50-kilometer race, compared to its predecessor, the Orca OMR. Orbea tested its aerodynamics at Mondragon University in Spain's Basque country to understand how the larger tubes can cut the wind.

Everything is integrated, from the internal cable routing to the low-profile seatpost clamp. (The M11iTeam comes equipped with Vision's Metron 5D integrated handlebar and stem. That bike will cost you an additional \$500.) The frame was designed to work best with 55-millimeter-deep wheels.

It's hard to nail down exactly what made the Orca Aero feel so peppy on the climbs, but a short 991-millimeter wheelbase and 408-millimeter chain stays help. The 73-degree head tube angle is also relatively steep for

an aero bike. Along with a 43-millimeter rake, the Orca Aero ends up with a 59-millimeter trail, which is tight for a bike in this category.

That helps explain why the Orca Aero's handling is well above average for the aero category. The steering affords a light touch. Plus, the fork is five millimeters shorter than the fork on Orbea's endurance ride, the Avant. This helps increase lateral stiffness and tightens the steering in corners. It's one of the best-handling aero bikes we've tested this year.

As you might expect, its massive tubes don't offer much compliance, and this was most noticeable at high speeds over deep cracks and pot-holes. Light chatter transmits most dramatically in the front end, and less so in the rear. While the Orca Aero is more comfortable than a lot of aero bikes, you won't mistake this for an endurance bike or pure climber.

Orbea doesn't break the mold in any particular aspect of its design: truncated air foil tube shapes, lowered seat stays, integration, a wide fork to improve air flow over the wheel. We've seen all this in other aero bikes. When it comes time to choose between the Orca Aero and another aero bike, the deciding factors will likely come down to brand loyalty, price, wind tunnel data, and spec. And then there's the handling, which truly sets the Orca Aero apart.

Orbea has done well to compete with much bigger manufacturers that boast superior R&D resources, marketing budgets, and global reach. The Orca Aero is accessible to a wide swath of riders, from the halo level M11iTeam (\$8,500) to the more practical M30Team (\$3,299).

We all want a vast stable of bikes, but realistically, most of us can only afford one, maybe two. The Orca Aero could easily be the one bike in your garage, as long as you understand what this bike is made for: rolling terrain, fast sprints, and occasional forays into the mountains.

HANDLING: 23.9/25 **PEDALING RESPONSE:** 24.0/25 **BUILD:** 14.6/15 **COMFORT:** 12.9/15 **VALUE:** 11.7/15 **AESTHETICS:** 4.1/5

OVERALL 91.2/100

