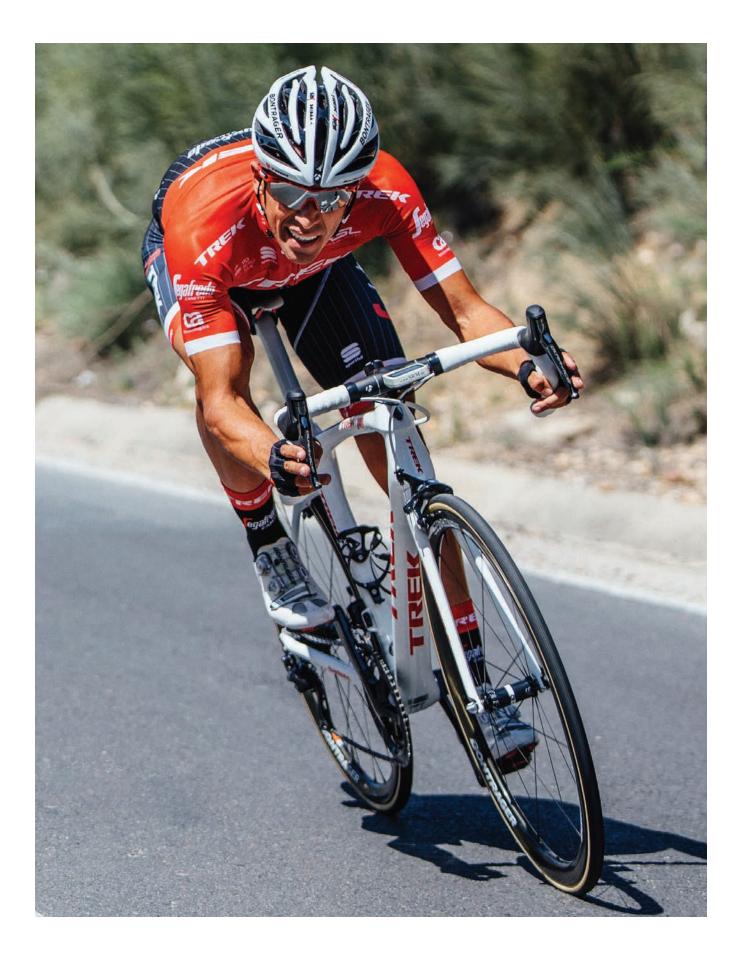
# THE ALL NEW **É M O N D A** Making the lightest lighter





## the all-new émonda QUERER ES PODER

It's a quote that appears on the top tube of Alberto Contador's Émonda. It means "where there is a will there's a way," and it's an attitude that not only drives Alberto in his pursuit of racing glory—it was the attitude Trek adopted in revamping the world's lightest production road bike.

They said we couldn't make the bike lighter. They said disc brakes had no place on an ultralight race bike. We said "querer es poder." Introducing the all-new Émonda: lighter, more efficient, and more compliant than ever before.





## ÉMONDA SLR 8 DISC







### A CHALLENGE WORTH Conquering

It's true that improving something that's already spectacular is more difficult than starting from scratch. How do you take the world's lightest, best-handling race bike and make it even better? That was the challenge our road design and engineering team was faced with in creating the new Émonda.

Their response did not disappoint. In a sport where even seemingly imperceptible advantages are painstakingly sought out, Émonda goes beyond marginal gains. By refining our existing production processes and introducing entirely new innovations, the new bike delivers a difference in ride quality and performance that riders will actually feel on the road. No doubt, Émonda climbs, sprints, corners, and descends better than any bike Trek has ever made. And it's now available with the all-weather, go-anywhere versatility of disc brakes.

## EVERY REVOLUTION NEEDS A HERO

Émonda Disc models redefine the experience of riding an ultralight race bike. With additional tire clearance, increased stopping power, better braking modulation, and consistent performance in all conditions, Émonda Disc is much more than a race bike. Flat mount disc brakes are more elegant, lighter, smaller, and cleaner than traditional disc brakes, making them right at home on Émonda. By opening up the world of gravel and adventure riding to those who prefer the feel of classic race bike, Émonda Disc revolutionizes expectations of what a dedicated road bike can and should be.



ÉMONDA SLR 9







#### ÉMONDA SLR

## THE PINNACLE OF LIGHTWEIGHT RACE PERFORMANCE

Émonda SLR is back to challenge the best on the climbs, corners, and descents of cycling's biggest races, and your local crit. With an improved carbon layup and years of stringent testing from the pros of Trek-Segafredo, Émonda SLR continues its reign as the world's lightest production road bike.

#### MORE THAN MARGINAL GAINS. MAXIMUM RESULTS YOU FEEL ON THE ROAD.

	PREVIOUS ÉMONDA SLR (56cm H1)	NEW ÉMONDA SLR (56cm H1)	NEW ÉMONDA SLR DISC (56cm H1)
Vertical compliance (N/MM)	162	165	165
Tour BB Stiffness (N/MM)(Higher=Stiffer)	52	56	55
Tour Head Tube Stiffness (Nm/Deg)(Higher=Stiffer)	86.5	88	88
Trek Full Frame Stiffness (Lower = Stiffer)	4.00	3.55	3.65
Weight in Grams (No Hardware)	690	640	665

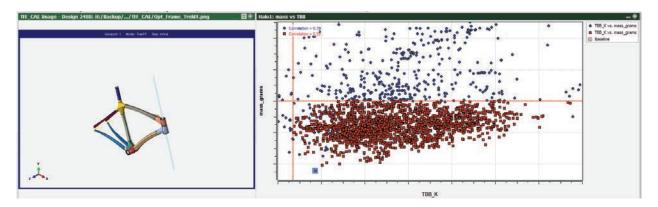


Image shows the HEEDS true multi-objective parameterized optimization output summary. In the top right portion of the image shows both feasible (red) and infeasible (blue) designs that have been evaluated. The pareto front of this chart is the trade-off between pedaling stiffness (Tour BB stiffness) and frame mass. You can see many thousands of designs have been evaluated.

#### Size-Specific Ride-Tuned performance

Our R&D team went searching for the holy grail of ride performance by tirelessly optimizing, prototyping, and testing new frame designs and carbon layups. Using advanced analysis techniques including parameterized optimization, finite element analysis, and strain gauge and accelerometer instrumentation, the team focused on reducing weight, increasing stiffness, and improving compliance. But increasing stiffness alone does not improve the handling characteristics of a road bike.

The placement and construction of the composite layers have a massive effect on ride quality, and without the information gleaned from extensive analysis, engineers are left to guesswork and hypotheticals. We prefer clear test results that show marked improvements. Testing in the lab provided the numbers our engineers were looking for, but performance and ride feel out on the road is what really matters. That's why the pro riders of Trek-Segafredo evaluated prototype after prototype to confirm that the story the numbers told held true on even the most demanding rides.

All of this testing and development didn't happen over night. It wasn't simple or easy, but focusing on each strand of carbon and every minute detail of frame design delivered a line of bikes with frames that are the absolute lightest in their class, with size specific carbon layups that ensure consistent ride feel across all frame sizes.

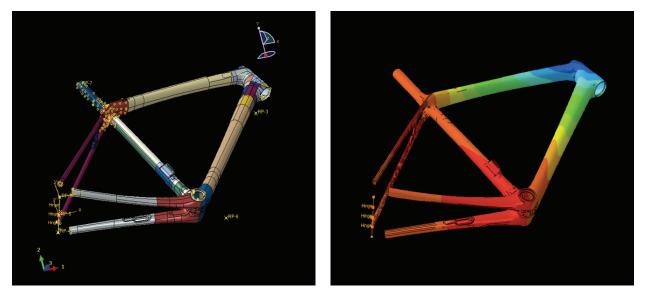


Image shows composite section property distribution within the Abaqus Finite Element Model (FEM). Each color represents a different unique composite ply stack sequence within the frame. Right image shows the deflected shape of the Emonda frame during high speed descending peak loading. Note that loads, boundary conditions, and load fixtures have been suppressed for image clarity and due to the proprietary nature of the load case and its setup.

#### **OCLV** Carbon

Nobody knows carbon like Trek. More than 25 years of experience refining our carbon production process has delivered a new 700 Series OCLV Carbon layup that significantly reduces Émonda's weight while simultaneously increasing stiffness. The result is a bike that's faster off the line, more responsive in the corners, and doesn't provide excuses on even the most leg-shattering climbs. Gram for gram, we will put the Émonda SLR up against any other bike on the road.

#### **Control Freak Cable Management**

Control Freak is the lightest, quietest, most versatile cable management system. It allows any combination of shift and brake housing to be routed through the frame for clean aesthetics and an easily customized set up.

#### **Flat Mount Disc Brakes**

Flat Mount disc brakes are more elegant, lighter, smaller, and cleaner than traditional disc brakes, providing superior performance and stopping power under harsh conditions.

#### **Bontrager Speed Stop Pro brakes**

For those who ride on the limit, brakes are the most important component besides a bike's frame itself. In addition to the all-new disc models, Émonda SLR is available with all-new Bontrager Speed Stop Pro rim brakes. These fully-tunable, direct-mount brakes weigh in at a strikingly low 95g. With hollow arms and Ti hardware, this Trek-Bontrager collaboration also increases tire clearance so that all riders can enjoy the increased traction and comfort that comes with running wider tires.

#### **Blendr Integration**

Blendr seamlessly mounts Bontrager Trip computers, Bontrager Ion lights, and Garmin computers directly to the handlebars, keeping everything zip tie-free and in its place.

#### **DuoTrap S**

DuoTrap S keeps your sensor and magnet in the right place without the use of zip ties or fear of sensors moving around and losing contact mid-ride. This speed and cadence sensor is integrated directly into the chainstay for clean aesthetics, and differs from our DuoTrap sensor by offering Bluetooth and ANT+ connectivity.

#### Lifetime warranty

The lightest road bike line in the world is backed by the cycling world's best warranty.







### NEW ÉMONDA SLR SUMMARY

- 700 Series OCLV Carbon frame
- Émonda SLR frame 640g
- Émonda SLR Disc frame 665g
- Émonda SLR fork 313g
- Émonda SLR Disc fork 350g
- Increased stiffness
- Improved ride quality
- 28c tire clearance
- Control Freak internal cable routing
- Ride-Tuned seat mast
- BB90
- Front and rear carbon dropouts
- Front carbon derailleur hanger
- E2 tapered headtube
- Carbon strike guard
- DuoTrap S
- H1 and H2 fit available
- Customizable through Project One

### NEW ÉMONDA SL SUMMARY

- 500 Series OCLV Carbon frame
- Émonda SL frame 1091g
- Émonda SL Disc frame 1149g
- Émonda SL fork 313g
- Émonda SL Disc fork 350g
- Émonda SL 5 fork 436g
- Increased stiffness
- Increased vertical compliance
- Improved ride quality
- 28c tire clearance
- Ride-Tuned seat mast
- BB90
- Control Freak internal cable routing
- E2 tapered headtube
- Carbon strike guard
- DuoTrap S
- H2 fit
- Women's Specific Model (Émonda SL 5 Women's)





## PROJECT 📀 NE

## BUILD YOUR OWN

Don't ride anyone else's bike. Pick your paint, pick your parts, and build your very own Émonda SLR in Project One.

trekbikes.com/projectone



