

THE NEWCOMER

Electric vehicle manufacturer NIO shocked the car world with a lap record at Nürburgring. That's just the beginning for this Chinese startup.

Text by KEITH GORDON

The track record for a production car at the Nürburgring in Germany is the Holy Grail for automakers, and the list of record holders comprises the very best performance vehicle designers: Porsche, Lamborghini, even track-car manufacturer Radical.

But the current record holder is decidedly lesser-known. NIO, formerly called NextEV, is a Chinese electric vehicle manufacturer that also operates out of Europe and the United States. In recent years the company has toiled on a project that evolved from its successful stint in the Formula E series, the pinnacle of electric vehicle performance. The result, the \$1.5 million EP9, is an all-out assault on the internal-combustion supercar. Last May, the EP9 recorded the all-time fastest lap at Nürburgring at 6:45—an astonishing feat, especially considering that

the elusive seven-minute barrier had only been cracked a few years earlier.

The secret to the EP9's success is its four electric motors, one for each wheel. Collectively, the motors combine to provide 1,342 bhp and propel the EP9 from zero to 62 mph in only 2.7 seconds, and zero to 124 mph in an absurd 7.1 seconds. The electric powertrain provides almost limitless torque, which might be considered violent if it weren't delivered so smoothly. This is especially useful as the car exits a turn and accelerates, its back end remaining firmly planted because of the car's advanced active suspension, which makes 200 calculations a second to instantly respond to impacts and changing levels of grip.

With a chassis made entirely of carbon fiber, the EP9 is surprisingly light, weighing

3,825 pounds. Much of this weight comes from the batteries (1,402 pounds), which have a range of 265 miles before they require 45 minutes to recharge (they can also be swapped out for charged batteries in around eight minutes).

The exterior is also carbon fiber, and features a rear wing that can be adjusted between parked, low-drag, and high-downforce positions, giving the driver exceptional control. The innovative body shape allows the EP9 to produce 5,395 pounds of downforce at 150 mph, similar to a Formula 1 racecar, and allows the NIO to reach three lateral Gs in a corner.

The EP9's record was almost 20 seconds faster than its own previous attempt. With feats like that, NIO could be king of "the Green Hell" for some time to come. Traditional supercar makers, be warned.



COURTESY OF NIO