



# The Next Generation of Hyundai N Performance

- Electrified RM20e Racing Midship Sports Car signifies the electric-based high-performance potential for Hyundai N brand
- RM20e based on RM development platform for future N brand products and inspired by the electrified TCR racecar
- Electrified RM20e variant produces a blistering 596 kW (810 horsepower) and 960 Nm (708 lb.-ft.) of torque

Hyundai Motor Company introduced the next-generation electrified RM20e Racing Midship Sports Car to the world at the Beijing International Automotive Exhibition 2020.

The RM nomenclature refers to the N prototype model's "**R**acing **M**idship" rear-drive, midship powertrain configuration, a fundamental design differentiator that yields ideal handling balance and agility from a low polar-moment of inertia. This RM platform facilitates an engineering "rolling lab" for testing high performance technologies, with outstanding connection to the tarmac at all speeds and driving conditions. This inherent balance and grip is also essential to help connect RM20e's copious 596 kW (810 horsepower) and 960 Nm (708 lb.-ft.) of torque to variable road surfaces.

In 2012, Hyundai embarked on project RM to develop and connect new high-performance motorsports technologies with future N models. Since the initiation of project RM, there has been a progressive evolution of the RM series, including: RM14, RM15, RM16 and RM19. In 2019, Hyundai's first electric race car was developed for the eTCR electric touring car series: '[Veloster N eTCR', unveiled at the Frankfurt Motor Show](#). RM models have progressively undergone extensive testing to validate advanced technologies, observe their effective increase in performance, and improve them for application in future N models.

- Our new electrified RM20e pushes the proven RM platform forcefully into a new, environmentally-focused decade of the 21st century, stretching the performance envelope of electrification on normal road environments. RM20e represents a revolutionary new chapter of electrified performance for the Racing Midship series, and our N engineers continue to garner valuable insights in the arena of zero-emission performance dynamics said **Albert Biermann**, President and Head of Research and Development Division at Hyundai Motor Group.

Featuring an explosively powerful 596 kW (810 horsepower) electric motor with 960 Nm (708 lb.-ft.) of torque, RM20e is expected to yield superb blasts from zero-100 kph (zero-62 mph) in less than three seconds and zero-200 kph (zero-124 mph) at 9.88 seconds. RM20e utilizes its midship-based motor placement and rear-drive layout to achieve the traction required for this level of acceleration. RM20e combines racecar-like levels of performance, balance, braking and grip while retaining daily-driver quietness, responsiveness and road-going capability.

RM20e's state-of-the-art electrified powertrain ensures zero-emissions combined with thrilling acceleration. As Hyundai boasts an industry-leading variety of electrified-propulsion solutions, including production HEV, PHEV, BEV and FCEV powertrains, a full spectrum of electrified powertrains are available for testing in this high-performance sports car platform.

[Hyundai's recent investment and strategic partnership with Rimac Automobili](#) has facilitated co-development of both BEV and FCEV prototypes. The electrified RM platform will continue to evolve along with the growth of this RIMAC partnership. Further, Hyundai Motor Group has set a strategic plan to deploy 44 eco-friendly models by 2025, taking the Hyundai N brand into the forefront of environmental responsibility.

- The RM20e sports car prototype clearly signals future electrified brand aspirations for Hyundai's performance N brand, moving N into the prestigious genre of supercar-level performance. Moving forward, Hyundai N not only increases drivers' heartbeats per minute via powerful internal combustion engines, but also through the instantaneous torque and environmental sustainability of reliable electrified powertrains. RM20e proves that N driving excitement will not be compromised, even in electrified model variants, said **Thomas Schemera**, Executive Vice President and Head of Product Division at Hyundai Motor Group.

The 'N' of Hyundai N stands for **N**amyang, home to Hyundai's global R&D center in Korea since 1995, where the N concept was born, and for the **N**ürburgring, home to Hyundai's European Test Center. The close connection between Namyang and the Nürburgring created the foundation for N, building upon the company's motorsport experience to bring thrilling road dynamics for those customers who truly love driving. The 'N' logo itself embodies this idea, as it symbolizes a classic road course chicane. Hyundai Motor N's high-performance technologies are honed at the iconic Nürburgring Nordschleife. Each car taking part in Hyundai Motor's accelerated durability tests will lap the track 420 to 480 times in both wet and dry conditions, simulating over 160,934 km (100,000 miles) of severe driving in just four short weeks. The Nürburgring, with 73 corners and 20.9 km (13 miles) of tarmac, is widely considered to be one of the most challenging tracks in the world, with a heritage that is second to none. It is also a motorsports complex and home to Hyundai Motor's own 3,600 square meter testing center, which is operated by the Hyundai Motor Europe Technical Center.

RM20e video can also be viewed on the company's [official worldwide YouTube channel](#) or [official website](#).

## RM20e (Hyundai N Brand Prototype) Specifications

- **Concept**
  - Midship, rear-drive high-performance sports prototype
  - Electrified powertrain
- **Body Configuration**
  - Two-seat, two-door coupe (Veloster N body-in-white)
  - (Aluminum extrusion front subframe)
  - (Steel tube and plate rear subframe)
- **Powertrain Layout**
  - Midship motor
  - Rear Drive Electric axle
- **Aerodynamics**
  - Front splitter
  - Large wing spoiler
  - Rear air diffuser
- **Motor**
  - 800V motor and inverter technology
  - 596 kW (4 x 148 kW) peak power (20-second interval)
  - 960 Nm (4 x 240 Nm) peak torque
  - **(810 Horsepower and 708 lb.-ft. Torque equivalent)**
- **Gearbox**
  - **Single reduction ratio 1:5.67**
  - Straight-cut gears (Spur)
- **Battery**
  - Energy: 60 kWh; peak power: 600 kW
  - Nominal voltage: 605 V; peak voltage: 705 V
  - Liquid-flooded battery-module technology
  - 800V fast-charging capability
- **Top Speed**
  - > 250 KPH (> 155 MPH)
  - *\* speed limited for public road driving*
- **Suspension Type**
  - (Front) MacPherson / (Rear) Double-Wishbone
  - (Adjustable hard points and geometry)
- **Dampers**
  - Conventional gas-pressure dampers
- **Brake**
  - 6-piston (front) / 4-piston (rear)
- **Parking Brake**
  - Mechanical type, in rear
- **ABS System**
  - Motorsport ABS M5 (Bosch)
  - *\* Not valid for public roads*
- **Steering Assist**
  - Rack-mounted motor-driven power steering
- **Steering Wheel Design**
  - Veloster N TCR design (with paddle shifters)
- **Overall Dimensions (mm)**
  - 4319 (length) x 1945 (width) x 1354 (height) /
  - 2672 (wheelbase)
- **Interior**
  - Sabelt® sport seats, 6-point safety harness system
  - E-drive dedicated instrument cluster
- **Overhang (mm)**
  - 899 (front) / 748 (rear)
- **Minimum Ground Clearance**
  - 80 mm
- **Tires**
  - (Front) 265/35R19, (Rear) 305/30R20
- **Wheels**
  - 19" X 10" (front) / 20" X 11" (rear)
  - One-piece lightweight forged aluminum alloy wheels
  - Larger, flared wheel-housing design

