

PRESS RELEASE

'Sense What's Coming' at CES 2018: Magneti Marelli to exhibit high-tech electronics, lighting and powertrain solutions, with a focus on autonomous driving, connectivity and hybrid/electric mobility

- Integrated sensors, cameras, radar and LiDAR in headlamps and tail lamps
- Vehicle-to-everything (V2X) technology for enhanced safety today and in future autonomous vehicles
- New technologies for hybrid vehicles that reduce carbon emissions and fuel consumption

For consumers and automakers eager to "sense what's coming" in vehicle technology, **Magneti Marelli** will display a wide range of smart, streamlined, high-tech and safe solutions during **CES 2018**, January 9-12 in Las Vegas. At its 6,000-square-foot exhibit area in Latour 5-7 at the Wynn Hotel, Magneti Marelli will showcase its market-ready technologies in electronics, automotive lighting, and alternative powertrain, with a focus on autonomous driving, advanced HMI, connectivity and hybrid/electric mobility.

Magneti Marelli's solutions uniquely address three areas of the car that are changing rapidly. Booth visitors can see first-hand the technology that will enable vehicles to: sense and connect with what's around them, display critical feedback to drivers and passengers, and meet stringent environmental and safety requirements.

"Our leadership in automotive technology helps OEMs bridge the gap as the industry evolves; we provide solutions for the vehicles of today and the car of tomorrow," said Pietro Gorlier, CEO of Magneti Marelli. "Our ability to collaborate across business lines, and integrate multiple vehicle technologies to deliver a super user experience is a distinctive asset."

Smart Corner™ helps light the way to autonomous driving

Building on its recent investment in solid-state LiDAR company LeddarTech, Magneti Marelli has integrated a camera, radar and LiDAR into advanced projector headlamps and tail lamps to produce the fully functional Smart Corner, which will be on display in a production vehicle. Experts from LeddarTech will be available in the booth to demonstrate their latest solid-state LiDAR technology, and the company is hosting the Leddar Ecosystem Pavilion at the show, located outside at Tech East, CP-23.

Smart Corner enables automotive designers to incorporate advanced lighting and sensor systems while enhancing styling aesthetics and world-class performance. It reduces weight, cost, and eliminates the need for separate packaging, wiring and connectors on the vehicle exterior.

Magneti Marelli's booth will feature a value-added selection of lighting modules, headlamps and tail lamps. The company is focusing its efforts on developing chip-mounted LED solutions to address the needs of all vehicle segments. Booth visitors can see everything from a small, scalable module providing increased functionality within tight space constraints, to a high resolution, 84 pixel ADB module.

Laser and double projection headlamps will be on display, along with an all-LED tail lamp and an OLED tail lamp prototype.

Advanced Human Machine Interface (HMI) Displays

Magneti Marelli will feature a variety of displays, ranging from low-cost designs to a full door-to-door display with controlled content distribution. The company's Portal Showcase provides content for everyone in the vehicle, incorporates AMOLED (active-matrix organic light-emitting diode) technology, and a thin 1.5mm thick display bonded to a curved surface.

Analog, hybrid and full digital instrument clusters can also be seen in the booth.

<u>Vehicle-to-everything (V2X) communication promotes safety</u>

V2X technology can prevent 80 percent of all accidents for unimpaired drivers, according to the U.S. Department of Transportation, by alerting them to dangers that conventional onboard equipment cannot detect. Magneti Marelli's V2X solutions expertly integrate driver warnings within the HMI, displaying them in the instrument cluster or center stack.

Booth visitors will see how the company seamlessly integrates V2X into the HMI of a current production cluster, as well as proven use cases for vehicle-to-infrastructure, vehicle-to-pedestrian, and vehicle-to-vehicle technology.

Alternative powertrain solutions for mild hybrid and electric driving

Magneti Marelli's industry-leading traditional and alternative powertrain solutions are derived from nearly 100 years of experience in motorsports. Proven in the harsh conditions of Formula One racing worldwide, the company's systems are adapted to meet the needs of the commercial vehicle market. One of the most novel outcomes, which will be on display at CES, is a mild hybrid 48 volt belt starter generator (BSG), an electric motor with integrated electronics that replaces a standard alternator. The BSG recuperates energy from braking, driving it back to power the internal combustion engine (ICE) and electrical systems.

Coming in at 400 volts, Magneti Marelli's power inverter module (PIM), supports medium range electric mode driving, up to 30 miles or more on a single charge. It is built to withstand harsh vehicle underhood requirements, such as high temperature and vibration, which is difficult to achieve with integrated power electronics all within a class-leading envelope.

Magneti Marelli designs and produces advanced systems and components for the automotive industry. With 86 production units, 14 R&D centres in 21 countries, approximately 43,000 employees and a turnover of 7.9 billion Euro in 2016, the group supplies all the major carmakers in Europe, North and South America and the Asia Pacific region. The business areas include Electronic Systems, Lighting, Powertrain, Suspension and Shock Absorbing Systems, Exhaust Systems, Aftermarket Parts & Services, Plastic Components and Modules, Motorsport. Magneti Marelli is part of FCA.

Milan-Auburn Hills, 19^h December 2017