



Connected Car News Daily: Broadcom Cannon Metawave, Spireon, Hyundai, Automata, Continual, Vodafone and Alps.

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In connected car news today are Cannon, Metawave, Spireon, Hyundai, Automata Continual, Vodafone and Alps.



Broadcom Expands Auto Ethernet

Broadcom announced its latest portfolio of automotive Ethernet devices designed to advance in-vehicle connectivity, infotainment, advanced driver assistance systems (ADAS) and smart mobility. With more than 50 million automotive 100BASE-T1 BroadR-Reach PHY and switch Ethernet ports shipped and growing, Broadcom expands its portfolio with the addition of 100BASE-T1 PHY, secure switch and smart camera MCU devices to address new and emerging applications.

High Power Charging from Cannon at eMove

Cannon brand will showcase a wide-ranging portfolio of innovative e-mobility solutions at eMove 360°. The company will highlight its ultra-fast liquid-cooled High Power Charging (HPC) solution, its global AC charging portfolio (IEC, SAE and GB/T) and its EV customization expertise

ITT Cannon will display the following product solutions at eMove360°:

- **Liquid Cooled DC High Power Charging (HPC) Solution** – The groundbreaking design concept utilizes a dielectric cooling liquid that runs from the cable throughout the connector’s contact system resulting in outstanding heat dissipation performance. The dielectric fluid is non-flammable and non-toxic with no compromise on worker safety and minimal environmental impact, while the weight-optimized cable design and minimized cable diameter make it ergonomic, light and easy to use. ITT Cannon’s DC liquid-cooled HPC solution is available in CCS1 and CCS2 variants for North American and European markets, respectively.
- **Customizable AC Charging Solutions** – In accordance with all key global standards – IEC, SAE and GB/T– ITT offers a comprehensive line of AC connectors, plugs, inlets and outlets that are fully customizable. With the widest amperage range in the industry, ITT Cannon can deliver customized handle colors, inlays and logos in addition to customized cables and end terminals.

Metawave Demos Advanced Radar

Metawave Corporation announced the first ever industry demonstration of advanced radar that is able to detect automobiles and their speed at 300 meters, and pedestrians and bicycles as far as 180 meters. Integrated with Infineon’s 77GHz radar chipset comprising of the RXS8160 MMIC and AURIX™ microcontroller, along with NVIDIA’s AI Processing Engine, Metawave’s development testing platform more than doubles today’s existing automotive sensors, which can only detect unidentifiable, often blurry objects at a much shorter 100 meter range.

WARLORD, Metawave’s smart radar platform, uses *one* antenna and pushes complexity to analog. With WARLORD, the antenna itself shapes and steers the beam, recognizes objects quickly in the analog space and leverages AI to learn as the radar sees.

Three sensors are fundamental components of the perception system for self-driving cars today: camera, LiDAR and radar. The camera is the highest resolution sensor but cannot see objects beyond 70 meters. LiDAR extends the range to about 180 meters with a fairly high resolution imaging capability. Radar operates at a lower frequency and sees long ranges sooner than any other sensor. Today’s radar lacks resolution and cannot differentiate objects. These systems require multiple antennas, which are heavy and expensive, and need to analyze every signal in the digital space, which takes time.

Hyundai CRADELS Perceptive Automata

Hyundai CRADLE, Hyundai Motor Company’s corporate venturing and open innovation business, today announced it is investing in Perceptive Automata to develop artificial intelligence software for self-driving cars and automated systems. Perceptive Automata, a startup based in Somerville, Mass. with an office in Silicon Valley, has developed software that gives autonomous vehicles the ability to understand

the state-of-mind of people, including pedestrians, cyclists and other motorists. The predictive technology enables automated vehicles to make rapid judgments about the intentions and awareness of people on the street. This gives machines unprecedented human-like intuition.

Perceptive Automata's core technology takes sensor data from vehicles that show interactions with people. This rich data is used to train deep learning models to interpret human behavior the way people do. The end result is sophisticated AI software that can be integrated into autonomous driving systems. With the software installed, autonomous vehicles can anticipate what pedestrians, cyclists and motorists might do next.

Perceptive Automata's software is particularly useful if a pedestrian begins to cross the street but sees the approaching autonomous car and decides to stop and 'wave' it on. In this situation, an autonomous vehicle without the software would stop and wait, even though the pedestrian has no intention to cross. Perceptive Automata's software can read the pedestrian's intent and pass this information to the autonomous system's decision-making module.

Continual Partnered with Vodafone

Continual, a leading provider of Connected Car and subscriber Mobility Experience Analytics, today announced that it has been collaborating for the past two years with [Vodafone Ireland](#).

Vodafone Ireland identified road experience as one of the first areas where optimization solutions using big data and machine learning techniques would yield very noticeable improvements for its customers, and hence became an area of focus for Vodafone Ireland. Vodafone is also actively preparing for the launch of 5G services internationally, and this connected mobility intelligence is helping Vodafone to prove the feasibility of accurately controlling the quality of service for Connected Cars, a pre-requisite towards the journey of Autonomous Cars.

Spireon Intros GoldStar Connect

Spireon, Inc., the vehicle intelligence company, introduces GoldStar Connect, a full-featured connected car mobile application that gives Buy Here Pay Here (BHPH) dealers and lenders the opportunity to increase customer loyalty and profitability. As the newest addition to the GoldStar GPS solution suite, GoldStar Connect helps dealers and lenders recoup the cost of GPS, while also increasing value, convenience and safety for consumers.

The BHPH sector has long used GoldStar GPS to mitigate risk. Dealers and lenders rely on GoldStar to stay connected to their customers in order to facilitate payment collection, monitor default predictors, and streamline recoveries when necessary. With the new GoldStar Connect mobile app, consumers now have access to all the benefits of connectivity—real-time location access, trip history, vehicle health alerts and recovery solutions for stolen cars—as an add-on at the time of purchase.

Alps' Connected Haptic Cockpit

Alps Electric will exhibit its latest products and technologies for markets encompassing current major technology trends represented by CASE domains (connected cars, autonomous driving, sharing and services, and electric vehicles) and the Internet of Things (IoT).

Centerpiece Exhibit: Premium Technology Cockpit (Debut Exhibit)

This vehicle cockpit brings together and combines device technologies of Alps Electric while achieving compliance with R79, a standard relevant to autonomous driving. The cockpit showcases highly functional devices ideal for autonomous driving systems, which demand highly advanced levels of safety and reassurance.

- Premium Capacitive Input and Control
- Addressable Marker and Optics/Electromagnetic Induction Technology
- Rolling Ball Mechanism Linked to HAPTIC™ Reactor (Electromagnetic Induction Technology Demo)