

Press Release December 9, 2025

Marelli introduces groundbreaking Affordable 5G RedCap technology for automotive

Marelli, a global technology supplier to the automotive sector, has unveiled its breakthrough Affordable 5G RedCap (Reduced Capability) technology for vehicle telematics that provides a 50% higher data rate with 2.5 times less latency than 4G, while still achieving a comparable price point.

Affordable 5G RedCap is a streamlined version of the 5G technology, already adopted for connected and wearable devices. Marelli has adapted this technology for the automotive sector, offering faster data transmission, lower latency, reduced hardware complexity, and minimal power consumption – which are key advantages for electric and connected vehicles. The new solution also provides an affordable alternative to traditional 5G for the upcoming phase-out of 4G networks, projected to start in certain regions beginning as early as 2030. Additionally, Marelli is working in close partnership with a leading telematics module supplier to ensure this next-generation telematics solution is compliant with the U.S. Hardware and Software Ban and USMCA (United States–Mexico–Canada Agreement) requirements for in region manufactured content.

The technology seamlessly switches between 4G and 5G networks, ensuring uninterrupted connectivity even in areas with limited or no 5G coverage. It also integrates dual-frequency GNSS (Global Navigation Satellite System) along with next-generation Wi-Fi and Bluetooth to further enhance drivers' and passengers' connectivity experience for media streaming, real-time navigation and over-the-air updates.

"Affordable 5G RedCap is a game-changer in automotive telematics. It solves for all the pain points we hear from vehicle makers today – 4G sunset, obsolescence, affordability, U.S. Ban and USMCA compliance", said Nate Sladek, Vice President Strategy and Product Management of Marelli's Electronics business. "By offering advanced connectivity capabilities at a price point close to 4G, we're setting a new benchmark for affordable connectivity, especially for vehicles that don't require the full performance of traditional 5G."

Marelli's Affordable 5G RedCap solution is ready for demonstration, with production samples available in early 2026 and the first global start of production (SOP) targeted in 2028.



BACKGROUD INFORMATION

Features of Affordable 5G RedCap telematics compared to 4G and traditional 5G

Feature	Traditional 5G	Affordable 5G RedCap	4G Cat. 4
Bandwidth	Up to 100 MHz	Up to 20 MHz	Up to 20 MHz*
Latency	As low as 1 ms	~20 ms	~50 ms
Data Rate	Up to 2 Gbps	Up to 220 Mbps	Up to 150 Mbps
Device Cost	High, due to complex hardware and advanced capabilities	Lower then 5G, due to simplified hardware and reduced capabilities	Moderate, due to balanced hardware and capabilities
Power Consumption	High, due to advanced features and high performance	Moderate, optimized for battery life and efficiency	Moderate, suitable for a range of devices

^{*}Today up to 20 MHz – this will reduce significantly once phase-out of 4G networks starts

About Marelli

Marelli is a global mobility technology supplier to the automotive industry. With a strong and established track record in innovation and manufacturing excellence, our mission is to transform the future of mobility through working with customers and partners to create a safer, greener, and better-connected world. With around 40,000 employees worldwide, the Marelli footprint includes over 150 sites globally.