COST-EFFICIENT 5G ROUTER FOR DIGITAL BILLBOARD MANAGEMENT

HIGHLIGHTS

- Managing digital billboards in remote roadside locations requires a reliable internet connection for real-time updates and remote monitoring, which is often unavailable due to weak or non-existent infrastructure.
- Teltonika's RUTM31 5G router was chosen for its high-speed 5G connectivity, dual SIM with auto-failover, RMS compatibility, and rugged design suited for harsh outdoor conditions.
- This solution enables seamless digital signage management, reduces operational costs by minimizing site visits, and ensures uninterrupted performance in even the most isolated environments.

THE CHALLENGE – ALWAYS IN SIGHT, NEVER OUT OF RANGE

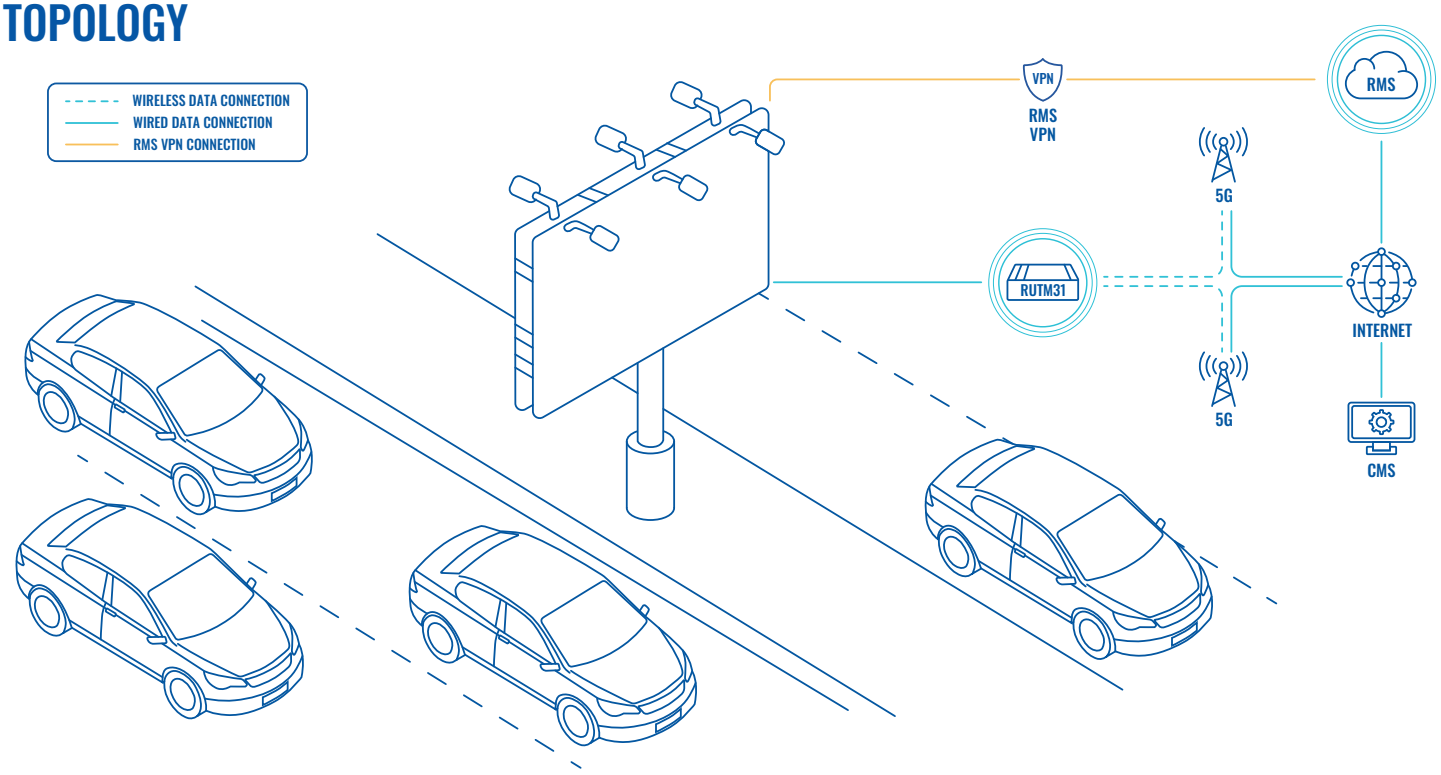
The global digital billboard market is experiencing significant growth, with projections indicating a worth of 112.52 billion USD by 2034, reflecting a compound annual growth rate (CAGR) of 10.2%. This surge is driven by the demand for dynamic, real-time content delivery in advertising.

However, deploying and managing digital billboards in remote or infrastructure-poor areas presents substantial challenges. Because of that, wired connectivity is either unavailable or too expensive to install. Such connectivity issues hinder the ability to perform remote management, updates, diagnostics, and maintenance, which necessitates frequent on-site visits. It not only escalates operational costs but also delays content updates, reducing the effectiveness of advertising campaigns.

Moreover, as advertisers increasingly seek to leverage real-time data and programmatic advertising, the need for stable, high-speed, and remotely accessible IoT solutions becomes paramount. Without such infrastructure, billboard operators risk falling behind in a competitive market that values immediacy and adaptability.

Addressing these connectivity challenges is essential for the continued expansion and efficiency of digital billboard networks, particularly in areas where traditional internet infrastructure is lacking.

TOPOLOGY



THE SOLUTION – COST-EFFICIENT, REMOTE-READY 5G ROUTER

To address the connectivity challenges of remote digital billboard installations, a reliable, high-speed, and cost-efficient IoT solution is essential. Teltonika's RUTM31 5G router delivers exactly that: robust mobile connectivity and full remote monitoring tailored for modern digital signage.

Equipped with 5G technology, the RUTM31 ensures ultra-fast broadband with lower latency and higher bandwidth than previous-generation networks. Where 5G coverage is limited, the router's backward compatibility with 4G LTE Cat 12, allows to maintain uninterrupted service. Dual SIM functionality with seamless failover further enhances uptime by selecting the strongest available network.

The 5G router connects to billboard control systems via Gigabit Ethernet and transmits data to the centralized Content Management System (CMS), enabling real-time content updates, scheduling, and playback monitoring without on-site intervention. This direct link ensures ad campaigns remain timely and relevant across all deployment locations.

Dual-band Wi-Fi provides additional flexibility for local maintenance and configuration. Integration with Teltonika's Remote Management System (RMS) allows secure RMS VPN access, remote diagnostics, and firmware updates – all from a single dashboard. This dramatically reduces operational overhead and minimizes downtime.

Despite offering top-tier 5G connectivity, the RUTM31 stands out as a cost-effective IoT solution. Its competitive pricing makes it an ideal choice for large-scale billboard networks where multiple units must be deployed across diverse locations.

Built to endure harsh roadside environments, this 5G router features rugged aluminum housing, a compact form factor, and resistance to extreme temperatures, ensuring consistent performance wherever it's deployed.

Don't let remote locations hold you back. Contact us today to order your RUTM31 sample and experience seamless, secure, and future-proof connectivity!