

[How It Works](#) [Demo](#) [Our Team](#)[Contact Us](#)

How it works

Acorn leverages advances in proven RFID technology as well as ARM CPUs (ARM) and Bluetooth/Wifi to deliver a system that is smarter, more efficient, and more cost-effective than the industry standard.

The linchpin of the system is the Acorn Tag—a weather-proof RFID tag installed at regular intervals along the route, replacing much of the infrastructure associated with conventional systems. When a vehicle passes over the tag, it reads and writes a range of performance data to support quick adjustments in operations. Unlike much of the infrastructure required to support industry-standard control and asset management systems, the Acorn Tag is inexpensive and easy to install.



By using this website, you agree to our use of cookies. We use cookies to provide you with a great experience and to help our website run effectively.

[OK](#)

encased within a hardened, weather-proof material that is impact resistant and ensures tags remain operational even when submerged in water or covered in snow and ice.

Acorn makes use of existing closed communications systems such as Wi-Fi or Bluetooth for onboard communications. Its virtual distribution model improves system performance by making vehicles more responsive to real time route conditions.

Installation and maintenance made easy

Acorn's system architecture overlays existing signaling systems to ensure continuity of service throughout implementation and software updates in the background to ensure no discernible disruptions in service. Route and trackside components are confined to the installation of Acorn tags at 25ft intervals along the route, and

Enhanced security and resilience

Acorn's advanced system architecture allows operators to achieve a level of cyber security not easily reached by standard controls systems. The system's components and software are sourced from multiple vendors, thereby limiting the risk of a vendor hack revealing system-wide vulnerabilities. If one component of the system is compromised, Acorn immediately isolates the affected software or hardware and alerts the driver without disrupting service.

By using this website, you agree to our use of cookies. We use cookies to provide you with a great experience and to help our website run effectively.

OK

available through multiple vendors, opening up the supply chain.



See it in action

We've developed a proof of concept of the Acorn system to demonstrate Acorn's functionality on rail systems. See it in action by watching the video or reach out to us today at partnerships@acorntechsystems.com to schedule a live demo.

By using this website, you agree to our use of cookies. We use cookies to provide you with a great experience and to help our website run effectively.

OK

By using this website, you agree to our use of cookies. We use cookies to provide you with a great experience and to help our website run effectively.

OK