REMOS™

Revolutionising Traffic Management
for a Safer, Greener Future

Introducing
REMOS™

Designed to transform the way we manage temporary traffic works, REMOS™ introduces a new era where traffic signals are controlled remotely, eliminating the need for on-site operatives.

This cutting-edge technology not only enhances safety and efficiency but also addresses key environmental concerns, making traffic management more sustainable than ever before.

What is REMOS™?

Representing a groundbreaking innovation in the field of traffic management, **REMOS**™ stands for Remotely Operated Signals.

Traditionally, a large proportion of roadworks are deployed with permits which require a traffic management operative to be physically present at the worksite to monitor traffic flows and respond to any issues. This approach, while effective, places a significant strain on human resources, increased operational costs, and exposes workers to potential hazards.

With REMOS™, these challenges are a thing of the past. REMOS™ allows for the remote monitoring and management of traffic signals from a secure, central location.

This system is designed to work seamlessly in all traffic environments, providing real-time data and control to operators who can manage multiple sites simultaneously.

REMOS™ is not just an improvement; it's a complete reimagining of how traffic management can be conducted.

SRL Admin & Tech Support   SRL Control Hub   Control Room

Secure 4G VPN

REMOS

Local Comms 458Mhz
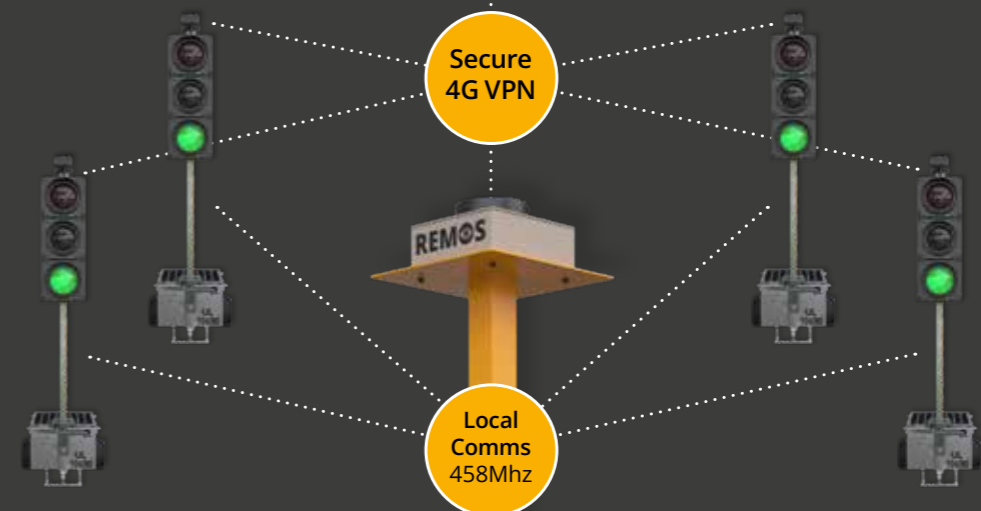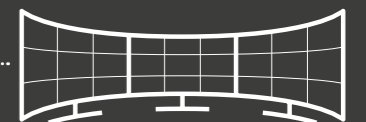
Challenges

Managing traffic at roadworks and other temporary traffic sites has always been a resource-intensive task. On any given day, hundreds of sites across the Ireland require on-site operatives to ensure smooth traffic flow and minimise disruption. However, this traditional approach comes with several challenges:

Strain on Human Resources
The constant need for on-site personnel stretches available resources thin, often leading to increased labour costs and logistical challenges in staffing.

Safety Concerns
Traffic management operatives are frequently exposed to dangerous conditions, working near moving vehicles. This exposure not only puts their physical safety at risk but also subjects them to potential roadworker abuse - a growing concern in the industry.

Environmental Impact
Regular site visits and the necessity of vehicle idling at work sites contribute to increased carbon emissions, negatively impacting the environment.

Public Perception
Local authorities often demand visible personnel at roadworks to provide reassurance. However, the effectiveness of this approach is limited by human error and fatigue.

These challenges underscore the need for a **more efficient, safe, and sustainable solution** - one that REMOS™ is uniquely positioned to provide.

How **REMOS**™ **Solves the Problem**

By enabling remote operation, REMOS™ removes the need for on-site operatives, significantly reducing the risks and costs associated with traffic management.

Here's how REMOS™ works:

1.
Data Capture:
REMOS™ systems are equipped with advanced radar sensors and CCTV cameras that continuously monitor traffic flow at the site. The radar detects vehicle movement, while cameras stream live footage of the area.

2.
Data Transmission:
The captured data is transmitted in real-time to SRL's Central Control Room via the SRL Control Hub. This web-based platform allows operatives to access live traffic data and video feeds from multiple sites simultaneously.

3.
Remote Operation:
Trained professionals in the control room analyse the real-time data and remotely manage the traffic signals. They can switch between automated modes and manual control as needed, ensuring optimal traffic flow at all times.

4.
Proactive Management:
REMOS™ allows for more frequent interventions and adjustments to traffic signals, reducing the likelihood of traffic congestion and improving overall efficiency. With REMOS™, potential issues are identified and addressed before they escalate, minimising disruption and enhancing road user safety.

A Gamechanger
in Traffic Management

Improved Safety
By removing the need for on-site personnel, REMOS™ significantly reduces the risk of accidents and injuries. Additionally, it eliminates the potential for roadworker abuse, a critical issue that affects worker morale and well-being.

Cost and Labour Savings
With REMOS™, one operator can manage multiple sites simultaneously from a central location. This capability drastically reduces the need for on-site operatives, leading to substantial labour cost savings.

Environmental Benefits
REMOS™ contributes to a greener environment by reducing the number of site visits and minimising vehicle idling. These factors directly reduce carbon emissions, helping organisations meet their sustainability goals.

Enhanced Process Efficiency
REMOS™ allows for the rapid identification and elimination of bottlenecks, ensuring smoother traffic flow and reduced congestion. There is no line of sight required; cameras have much greater visibility than an operative on site.

Reliability and Compliance
REMOS™ is built on a robust platform that ensures consistent performance and compliance with industry standards.

REMOS™ is a new, **indispensable tool for** traffic management, offering a superior alternative to traditional methods.

A Greener Solution
for Traffic Management

Sustainability has never been more important. Organisations are seeking ways to reduce their environmental impact, and traffic management is no exception.

With REMOS™, the need for frequent site visits is eliminated, as all traffic signal operations can be managed remotely. This reduction in travel not only lowers fuel costs but also cuts down on emissions, contributing to a cleaner, greener environment.

Vehicle idling is another major contributor to carbon emissions at traffic management sites. With REMOS™, the improved efficiency in traffic flow reduces the amount of time vehicles spend idling at temporary traffic signals. This decrease in idling time directly translates into lower emissions, further enhancing the environmental benefits of REMOS™.

To put this into perspective, removing just one on-site operative from traffic management operations for a full working year can reduce carbon emissions by approximately 3,564kg.

Multiply this across several sites and operatives, and the environmental impact becomes substantial.

Beyond the direct reduction in emissions, REMOS™ also aligns with broader sustainability initiatives by promoting more efficient use of resources. The reduced need for travel, combined with the optimised management of traffic flow, means fewer resources are consumed overall.

SRL Control Hub
Centralised, Secure, Efficient

At the heart of REMOS™ is the SRL Control Hub, a secure, web-based platform that enables the remote operation of traffic signals. This sophisticated system allows trained operators to monitor live traffic flows, switch between automatic and manual modes, and control signal operations with precision - all from the comfort of a central control room.

User-Friendly Interface
The SRL Control Hub has been designed with the user in mind. Its intuitive interface allows operatives to quickly access critical information and manage multiple sites simultaneously. The dashboard provides real-time data, live video feeds, and control options, ensuring that operators have all the tools they need at their fingertips.

Security and Compliance
Security is paramount in the operation of the SRL Control Hub. Access is restricted to qualified operators, ensuring that only authorised personnel can control traffic signals. The system is also designed with GDPR compliance in mind, with no storage of CCTV images, thereby safeguarding privacy while adhering to legal standards.

Operational Flexibility
The SRL Control Hub offers flexibility in traffic management operations. Operators can switch between Vehicle Actuation (VA), Multiphase ADS, and manual control modes, depending on the specific needs of the site.

Inside REMOS™
Key Components

Each REMOS™ component has been carefully selected and engineered to ensure seamless operation and optimal performance.

UltraLight™ Boxes
These are the heart of the REMOS™ system, housing the control electronics that manage the signal operations. UltraLight™ boxes are designed to be robust and weather-resistant, ensuring reliable performance in all conditions.

RTMC & Control Hub Subscription
The Remote Traffic Management Controller (RTMC) is the brain of the REMOS™ system, processing data from the radar and CCTV components and transmitting it to the Control Hub. Subscription to the SRL Control Hub provides ongoing access to the platform's features, ensuring continuous operation and support.

REMOS™ Signal Heads
The signal heads are equipped with high-visibility LED lights that ensure clear communication of traffic signals to drivers. These signals are remotely controlled via the SRL Control Hub, allowing for instant changes in response to traffic conditions.

CCTV Cameras
High-definition CCTV cameras are installed in the head of the traffic light signal, providing live video feeds to the control room. These cameras are crucial for real-time monitoring, allowing operators to assess traffic conditions and respond accordingly.

Multiphase ADS Detectors
The ADS detectors continuously scan the area to detect vehicle movements. This data is crucial for the automated management of traffic signals.

Safety First: Compliance and Reliability

By adhering to the highest industry standards and regulatory requirements, REMOS™ ensures that traffic signals operate safely and reliably, protecting both workers and road users.

REMOS™ meets all relevant statutory guidelines and industry standards, including:

BS EN 50556:
Road traffic signal systems.

BS EN 12368:
Traffic control equipment—signal heads.

BS EN 12675:
Functional safety requirements for road traffic signal control systems.

BS EN 50293:
Electromagnetic compatibility for road traffic control systems.

Operational Security
REMOS™ is built with multiple layers of security to protect the system from unauthorised access. All operators undergo rigorous security vetting, and the system itself is protected by advanced encryption and access controls. This ensures that only qualified professionals can operate the system, maintaining the integrity of traffic management operations.

GDPR Compliance
Live feeds are used solely for real-time traffic monitoring, with no data retention, ensuring that the privacy of individuals is respected.

Reliability in the Field
REMOS™ has been extensively tested in real-world conditions to ensure its reliability. Whether dealing with adverse weather, high traffic volumes, or complex traffic scenarios, REMOS™ has proven to be a dependable solution.

Your Questions Answered:
REMOS™ FAQs

To help you better understand REMOS™ and its capabilities, we've compiled answers to some of the most frequently asked questions:

Q: How does REMOS™ handle sites with limited network connectivity?

A: The technology we use in REMOS™ allows for video streaming in poor network / bandwidth areas, with almost complete network coverage.

Q: How many stages/phases can REMOS monitor?

A: REMOS™ is capable of monitoring up to eight stages or phases at any given time. This allows a single operator to manage complex traffic patterns across multiple sites simultaneously.

Q: What does the REMOS™ Control Room consist of?

A: The REMOS™ Control Room is a secure space equipped with high-resolution screens for viewing live video feeds from traffic sites. Operators have licensed access to the SRL Control Hub, where they can manage signals in real-time.

Q: What is the maximum range between REMOS™ signals?

A: REMOS™ is designed to work effectively with up to 300 meters between signals, even in situations where line-of-sight is not possible.

Q: Are CCTV images stored?

A: No, REMOS™ does not store any CCTV images. The system is designed for real-time monitoring only, ensuring compliance with GDPR regulations and protecting individual privacy.

Q: Does REMOS™ comply with industry standards?

A: Yes, REMOS™ adheres to all relevant statutory guidelines and industry standards, including BS EN 50556, BS EN 12675, BS EN 12368, and BS EN 50293, ensuring reliability and safety in its operations.

The Future of Traffic Management Starts with

REMOS
REMOTELY OPERATED SIGNALS

Join the REMOS™ Revolution

SRL