

REM®S

REMOS™

Designed to transform the way we manage temporary traffic works, REMOS™ introduces a new era where temporary traffic signals are controlled remotely, eliminating the need for onsite operatives, enhancing safety and reducing carbon emissions.

KEY BENEFITS:

- Improved Safety Reduces the risk of accidents, injuries and roadworker abuse by minimising the need for onsite operatives.
- **£** Cost & Labour Savings One operator can manage multiple sites simultaneous from a central, secure location, streamlining human resources costs as well as costs associated with travel to site and vehicle wear and tear.
- **Environmental** Greatly reduce the number of site visits as well as vastly reducing idling time for roadworkers.

REMOS USE CASES - POTENTIAL SITE CONFIGURATIONS:

- 2 Way Shuttle
- 2 Way Shuttle with Single Pedestrian Crossing
- 3 Way (Multi Phase) Junction
- 3 Way Junction with Single Pedestrian Crossing
- 3 Way Junction with Double Pedestrian Crossing
- 4 Way (Multi Phase) Junction
- 4 Way Junction with Single Pedestrian Crossing
- 4 Way Junction with Double Pedestrian Crossing
- 4 Way Junction with Four Pedestrian Crossings

** During initial, early adoption phases, SRL will only deploy and support REMOS installation within a 1.5hr radius to our REMOS depot (Solihull).

Max Stages	Monitor up to 8 stages / phases
Max Signals	17 signals + 1 REMOS unit
Pedestrian Functionality	Yes
Compatibility	SolarLight can also be used with REMOS

Highways Approvals & Compliance



Available to hire

E hire@srl.co.uk **T** 01606 738866 **W** srl.co.uk Scan here for more REMOS™ information



$\mathbf{REMOS}^{\mathsf{TM}}$ / Technical Information



PHYSICAL APPEARANCE	
Signal Head Configuration	Single Head Capability
Height	2320mm
Box Dimensions	465mm (H) x 700mm (W) x 860mm (D)
Overall	2320mm (H) x 700mm (W) x 1070mm (D)
Weight (exc. batteries)	84kg
Weight (inc. batteries)	122kg
Security	Four bullet locks and one T-bar lock as standard

POWER	
Battery Type	Lithium Phosphate
Run Time	21 days *Based on 6 hour camera operation per day. Signals can run 24/7
Battery Capacity	460 Ah
No. of Batteries	1
Charge Time	8 hours
Operating Voltage	12v
Operating Current	8w
Charging Mechanism	On

REMOS OPERATOR - RESPONSIBILITIES & COMPETENCIES	
Extent of Control	Demanding a stage with the immediate shutdown of an active stage once the active stage has run its minimum green The demanded stage will not run its starting amber until the local safety red time has run its timer
	• 'All red' facility which is subject to local safety red times
	Removing the REMOS manual operation will revert the signals to run local VA control dependent on site setup
Minimum Training Requirements	Basic Introduction to Traffic Signals Course for REMOS Operators. IHE Approved, JCT Consultancy
	NHSS 12D T7 Managers & Client Officers LANTRA, UTS training
	Comprehensive REMOS equipment and SRL Control Hub training

OPERATING MODES	
Default Mode of Operation	Multiphase ADS *Excluding pedestrian
All Red	Yes, set up on site, only
Red Time Method	1 second increment changes
Adjustable Green Time	Yes, via SRL Control Hub. SRL's Control Centre can override max green time through manual control but cannot alter minimum green time or VA max timing
Adjustable Red Time	Yes, set up on site, only
Manual	Yes, set up on site, only
Fixed Time	Yes, set up on site, only
Day Programming	Yes, set up on site, only
Part Time Signalling	Yes, set up on site, only
Signal Dimming	Yes (auto-dimming)
UTMC Compatibility	No
Safety Class	TOPAS 2540A
Compliance	REMOS adheres to the Department for Transport's statutory guidelines and industry standards (BS EN 50556, BS EN 12675, BS EN 12368,BS EN 50293)
IP Rating	56

REMOS CAMERA	
Camera Position	Next to the radar detector to the top of the signal
Resolution	TBC
Security	Embedded, military grade security with proven commercial deployed by federal agencies in the UK and US.
GDPR Compliance	Streamed in real-time only
Connectivity	Ability to stream in real-time. 99.5% multi- network SIM coverage



Available to hire

E hire@srl.co.uk **T** 01606 738866 **W** srl.co.uk



REMOS CONTROL ROOM	
Hours of Operation	07:00 – 19:00
Location	SRL REMOS Centre, Radial Park, Birmingham Business Park
Operator Programme	SRL Control Hub, web-based browser
Room Security	Door access system for authorised personnel only
Primary Communication Network	Redundant, fibre-optic network for high- speed data transmission
Routing	Redundant routing with failover capabilities to ensure consistent connectivity to external networks
Switches	Managed switches with gigabit capability, Layer 3 with failover mechanisms for redundancy
Backup Communication Network	24-hour UPS (backup power), as well as a secondary line in case of fibre-optic network failure. The primary runs at 1Gbps speed, the secondary is 500mbps
Standby	Backup PC and all hardware in case of failure
Personnel	REMOS Supervisor omnipresent to support escalation / process support with REMOS Operators

REMOS SERVICE PROCESS

ONBOARDING

- Two weeks' notice prior to site start
- TM plans supplied and permit reviewed by REMOS team
- Local Authority engagement to check and detail timing plans
- Site survey form start and end date, site moves, escalation, approval
- RAM list to include SRL for timings, only
- Control room operator assigned
- Communications and timings checked

SERVICI

- Traffic Management maintains responsibility for service and site issues reported by end user.
- Flexible service hours to fulfil permit requirements
- Service Log
- Service Report (automated audit trail)
- Escalations and Issue Log to Traffic Management

OFFBOARDING

- Scheduled end date in site survey
- Collection confirmed by REMOS team and liaision with depots
- Service decommissioned and control hub session terminated
- Service report issued

EMISSIONS MODELLING

REMOS has the potential to greatly reduce our carbon footprint around traffic management.

Indicative carbon emissions reduction of one operative removed from site for a full, working year.



AND fewer Health & Safety incidents, with improved worker morale!

SAVING 3,564 kg CO2 Emission / Annum

Available to hire