



Evo[®] 1

Introducing the **Evo1 Crossover**, the first portable traffic signal system to feature permanent signalling technology.

Evo1 has been designed to overcome the common issues of current signal offerings, with high reliability, enhanced battery security and the ultimate in signalling efficiency, helping to reduce driver frustration and lower the environmental impact of roadworks.

When combined with the Evo1 Pro, Evo1 delivers a host of performance benefits, including UTC integration and permanent signalling functions to include stage-based signalling and CLF plan support.



More Efficient

Evo1 features AutoGreen Technology and Smart VA, intelligent signalling technology that reduces congestion and emissions.



High Comms Reliability

The ultimate in wireless comms reliability with our new Clarity antenna and Active Channel Management technology.



More Secure

Our multi-point battery security system hinders and prevents unwanted battery removal.



Crossover Function

Pair the Evo1 with the Evo1 Pro to unleash the power of permanent-style stage-based signalling.



Extended Battery Life

Onboard Battery Management System that extends battery life and supports battery care with up to 21-day runtime.



Track Evo1 Online

Manage Evo1 online with GPS location, battery levels, signal faults and more via our online platform, TMdesk.



Greater Driver Visibility

Evo1 features a raised signal pole and hi-viz design for enhanced driver perception and to increase site safety.



Fully Tested

No other signal manufacturer goes to the lengths we do to ensure safety, quality, compliance and performance in every product solution.

Performance Capabilities

Controller

Signalling Method	Phase-based Stage-based (with Evo1 Pro)
Red Time Method	Datum
Max. Traffic Phases	9
Max. Pedestrian Phases	1
Max. Pedestrian Crossings	8
Max. Signal Heads	34
Max. Vehicle Heads	18
Max. Pedestrian Heads	16

Technical Specification

Power

No. of Batteries	Up to 3
Battery Technology	Deep Cycle AGM (12V 105Ah)
Integrated Charger	No, features on-board charging port depot
Runtime on Single Charge	Up to 21 days (3 batteries)
Signal Dimming	Integrated dimming for night-time operation
Controller Auto-sleep	✓

Physical & Security

Signal Head Options	Traffic, Pedestrian
Controller Options	Evo 1 only
Finish	White with Hi-Viz Yellow Band
Handle	Removable
Footprint	600mm x 430mm
Physical Security	Fully integrated design
Client Specific Coding	No
Keyed alike option?	Yes
Total Weight with Batteries (Kg)	<90kg (0 batteries) <140kg (2 batteries) <165kg (3 batteries)

System Function

Compliance	TOPAS 2502, 2505, 2537, 2538
Auto-Recovery	Time-based Restart

Operating Modes

- AutoGreen (2-way + ped)
- Smart VA (up to 9 phases)
- UTC (with Evo1 Pro)
- CLF Plan (with Evo1 Pro)
- Manual Control
- Fixed Time

Features

- Pedestrian Crossing with Ped Guard
- Call All-Red from any signal
- Run with Lights Off



Radar & Radio

Detection Technology	AGD308 FMCW Smart Radar
Radar Power	<100mW eirp
Radar Frequency	24.150 to 24.250 GHz
System Range	5 to 500m subject to line of sight variations
Active Channel Management	✓
Antenna	Custom Clarity Antenna
Radio Frequency	458.500 to 458.950MHz band with <500mW eirp

Environmental

Dry Heat (BS EN 60068-2-2:2007)	✓
Cold (BS EN 60068-2-1:2007)	✓
Damp Cyclic (BS EN 60068-2-30:2005)	✓
Drop (BS EN 60068-2-31:2008)	✓
Impact (BS EN 62262:2002 & BS EN 60068-2-75:2014)	✓
Random Vibration – Operational	✓
Bump (BS EN 60068-2-64:2008)	✓
Shock (BS EN 60068-2-27:2009)	✓
Water Ingress (BS EN 60529:1992 + A2:2013)	✓
Drop and Topple (TR2130E & BS EN 60068-2-31:2008)	✓
Wind Tunnel Test	✓ ≤65mph
Dust Ingress (BS EN 60529:1992+A2:2013)	✓



Making Streetworks and Roadworks Greener.

Evo1 and Evo1 Pro have been specifically designed to minimise congestion at roadworks through advanced signalling and detection methods.

By using our advanced systems, traffic managers can achieve a traffic flow enhancement of 18-30% leading to savings of approx. 3 tonnes of CO2 per day.

Deliver complex schemes with Signal Studio.

Our signal planning software can be used to design, simulate and send stage-based signal timing plans from the office directly to the master controller on-site.

By pairing Evo1 with Evo1 Pro, you can deliver more efficient sites with permanent style signalling and prevent unwanted roadside configurations.



Evo1 Pro Features

The power of permanent signalling is unlocked with Evo1 Pro, a purpose-built temporary controller system that combines with Evo1 signals for ultimate efficiency. With Evo1 Pro, our Professional Services team work with the Traffic Management provider to design, install and manage complex signal deployments.



UTC
integration



CLF plan
support



Phase delay



Staged-based
signalling



Part-time
operation



Unlimited
signal heads

