

The 'SMART' signage-system is industry changing and industry leading. Service provided has consistently been excellent.

Martin Pollard
Chevron Traffic Management

SMART Frame

SmartFrame is a remote-controlled rotating road sign. As a modified standard sign plate SmartFrame is the most cost effective solution for mounting signs on narrow central reserves or concrete barriers. Automatically swings your sign in line with the fence when not in use.

KEY BENEFITS

- Improved worker safety, as signs no longer need to be accessed to erect or change them
- Reduced number of road crossings
- Reduction of manpower and vehicle usage
- Longer working windows
- React faster to traffic flows

SmartFrame is compatible with all standard concrete barrier profiles, suitable for use with both frangible and conventional posts and has low installation costs, low maintenance and servicing requirements too.

SmartFrame can be combined with SmartSign and SmartBlind. Our products have a modular design, so you can change any module with ease. All our units are solar powered for increased durability and reduced carbon footprint.

SmartFrame provides improved worker safety, as signs no longer need to be accessed to change them. It is typically 35 times cheaper than other variable message signs. Your working window will be extended by up to eighty minutes because traffic management can be altered rapidly.

All products are serviceable on site and come with a 12-month warranty. Each SmartFrame is 95% recyclable.



To discover how TM Safety Signs can help your company become **safer**, **greener** and **more efficient** get in touch with one of our representatives:

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SmartFrame is being used extensively where wide carriageways and concrete barrier make road crossings difficult or impossible. Almost one hundred SmartFrames with 3 & 4 Lane Wicket SmartSigns with SmartBlinds are currently installed on the M4, M5 and M25.

HOW IT WORKS

The handheld transmitter or your GPRS connected device sends a digital code to the SmartFrame receiver. The receiver will receive and decode this transmission. If the signal is valid, the receiver enters a timed active mode and carries out the command. Once complete, the receiver goes to 'sleep' and waits a further command. If GPRS is used, the sign will send back a verification message to confirm that the action is complete. GPRS will also alert the operator when any failure is detected, allowing a prompt and accurate response by maintenance personnel. Two integrated batteries supply the receiver and motor power, which in turn are charged by the conformal solar panel. Minimal current draw allows the small solar panel to keep the batteries charged throughout the year, eliminating the requirement for a mains supply or service visits. SmartFrame is typically combined with SmartBlind for additional flexibility.

PERFORMANCE

SmartSign has two main competitors, permanent 'gantry' type VMS systems, and the traditional manual traffic management operation. VMS offers tremendous flexibility but at a cost. Coverage is sporadic due to the high capital expenditure. A typical VMS system will cost between 7 and 40 times as much as a single SmartFrame unit. Essentially, an entire SmartFrame 'Chapter 8' array could be installed for the cost of a mobile VMS unit.

The traditional 'run across the road' system for traffic management appears to offer the lowest cost. This becomes less obvious when the additional time and resource factors are considered, even before the obvious risks to personnel. Our customers report that typical implementation times for a lane closure are reduced to 20 minutes, using only two personnel and a single vehicle. This time is not affected by traffic counts.

SmartFrame will complement traditional methods too. A common solution is to put SmartFrame only on the central reserve, keeping 'dumb' signs on the verge. This reaps almost all of the advantages, at half of the price.

CONSIDERATIONS

Susceptibility to wind damage when fitted with SmartBlind. We have worked hard to improve SmartBlind. With the innovation of polycarbonate shields, the system is far more resistant to strong wind events

System Mass A 3 Lane Wicket will weigh up to 31 kg. This can be difficult to handle. Most clients elect to position SmartFrame units in permanent locations, where they can be activated only when needed

Excess power drain SmartFrame is designed for 2 operations per day. More frequent operations, especially during the winter, have resulted in flat batteries. Additional battery capacity can be installed under these circumstances. We are also developing a miniature wind generator that will complement the solar panel

LEGAL USAGE

- The product can turn virtually any sign face into a VMS.
- TM Safety Signs Ltd will supply any sign plate to current standards.
- All servicing and modifications must be carried out using original parts, and under the supervision of TM Safety Signs Ltd.
- Industry standard mounting attachments are used throughout. Quick-Fit for the temporary units, and Sign-Fix channel for the permanent.

RETURN ON INVESTMENT

- Less than £1400 as an add on to SmartSign or SmartBlind
- As much as 80 minutes added onto a working window
- A potential elimination of carriageway crossings by personnel
- Units are positioned at strategic locations that suit your operation
- Solar power means minimal infrastructure costs

Based upon the time saving on traffic management alone, a 1/2 set of 'Chapter 8' SmartFrames will pay for themselves in approximately 25 weeks of usage. The daily addition of 80 minutes of working window will be vastly more precious. Even after years of use, your SmartFrame will still be valuable. A typical major upgrade (after 5 years of service) will cost less than 40% of the initial outlay. For this we offer a full 12-month 'as new' warranty.

Clients include:



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JACOBS

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