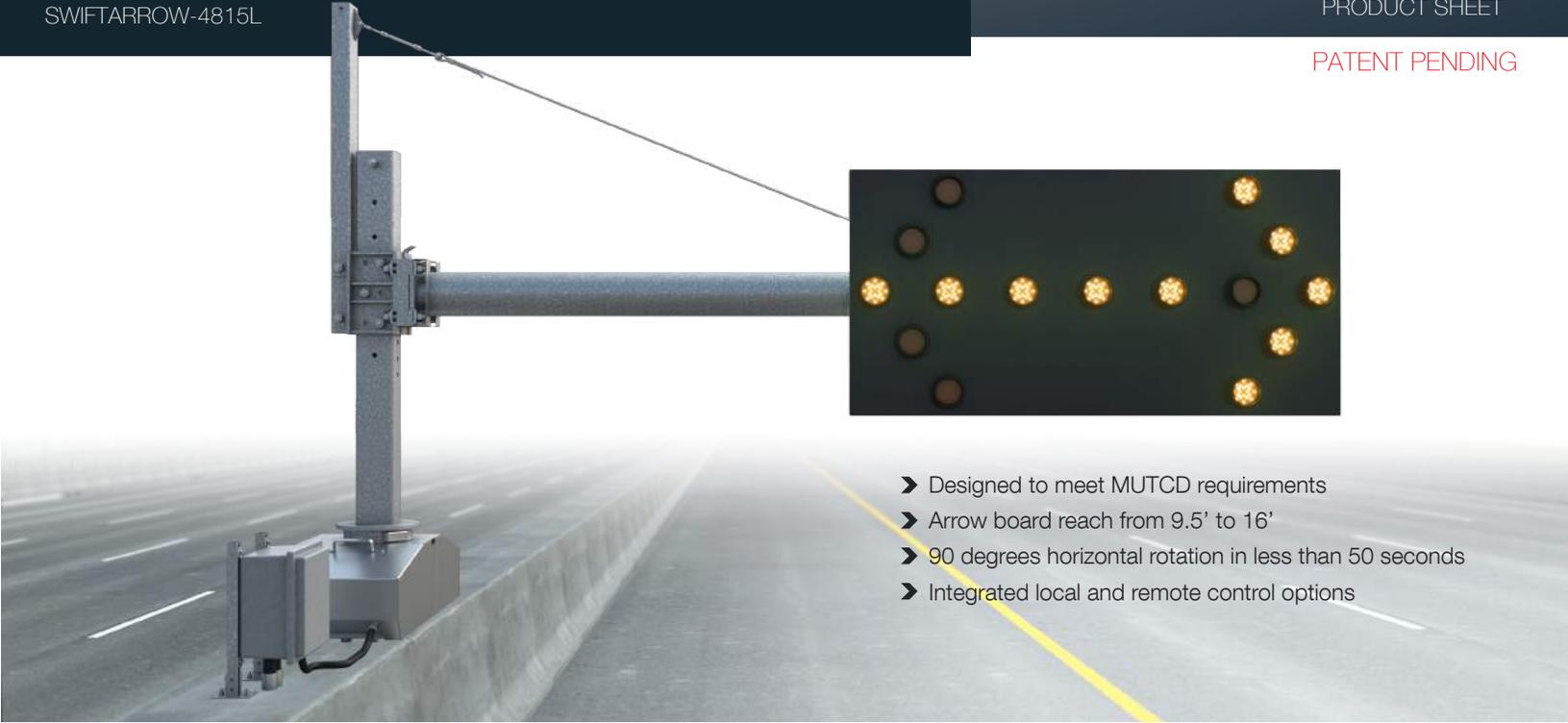


# AUTOMATED ARROW BOARD

SWIFTARROW-4815L

PRODUCT SHEET

PATENT PENDING



- Designed to meet MUTCD requirements
- Arrow board reach from 9.5' to 16'
- 90 degrees horizontal rotation in less than 50 seconds
- Integrated local and remote control options

## SWIFTARROW SOLUTION OVERVIEW

SwiftArrow is the Versilis automated arrow board solution specifically designed to increase lane closure awareness and visibility. Replacing the traditional trailer-mounted arrow board, it also increases traffic control safety by eliminating the need for workers to repetitively set up and dismantle trailers on the roadside. The SwiftArrow falls under the SwiftGate umbrella of products, as they all share the same design key features and communication technology. Versilis has kept the same objectives in the design of each product: motorist safety, ease of integration, and operational efficiency.

## SWIFTARROW OVERVIEW

The SwiftArrow consists of a barrier wall mounted, rotating base and an arm mounted arrow board. It can be used as a standalone product or be deployed sequentially as part of a gate array, to close the right or left lane of a multi-lane road. Manufactured with corrosion resistant materials, the SwiftArrow is designed to withstand harsh roadside conditions and weather environments. Operation and integration are facilitated with Versilis communication devices which offer different communication options, allowing the arrow board to be operated, monitored, and sequenced, locally and remotely.

## SWIFTARROW OPERATION

The SwiftArrow includes the necessary Versilis Control Unit to receive and execute commands. A system application may include arrow modules as part of an overall solution that brings together various traffic devices, including SwiftSign, SwiftGate, lane control signs, flashing beacons, traffic light controllers, etc. The ITS traffic devices can be activated individually, in sequence, and in groups. Different communication interface options allow the SwiftArrow to be controlled and monitored remotely from a Traffic Management Center. For on-site operation & maintenance, a smart handheld remote control is available, as well as push buttons.

## APPLICATIONS

- Work Zone Lane Closures
- Bridge and Tunnel Lane Closures

- HOV Reversible Lane Closures
- Road Zipper Operations
- Any Repetitive Lane Closure Operation

**SAFETY  
PERFORMANCE  
EFFICIENCY**

INCREASED HIGHWAY OPERATION EFFICIENCY

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## TECHNICAL FEATURES

### PHYSICAL

- Panel reach from 9.5' to 16' (from rotation center to end of panel, final length adjustable on site)
- Horizontal pivoting range of 90 degrees
- Deployment or retraction time: typically less than 50 seconds
- Arm: aluminum alloy tube
- Reduced base support frame footprint
- Designed according to AASHTO LTS-6 2013 (exceptions may apply)
- Wind load: up to 84 mph as per AASHTO LTS-6 (equivalent to 76 mph as per AASHTO LRFD LTS-1)

### ARROWBOARD

- 8' x 4' arrow board
- 15 amber LED lamps per board
- 4 modes: left or right arrow (10 lamps), single line (7 lamps) and 4 corners beacons
- Photosensor for automatic lamp intensity adjustment
- Flashing rate: 1 second ON per 2 seconds
- Designed to meet MUTCD requirements

### BASE

- Galvanized structure with removable aluminum covers
- Built-in anchoring plate, pre-drilled for anchor studs
- Mounts on concrete barrier wall or block (42" tall)
- Housing dimensions: 25" x 55"
- Weight excluding panel and arm: Approx. 1464 lbs

### GATE MECHANISM - MOTORISATION

- Permanent magnet 12V DC electrical motor
- Gearbox worm type, self-locking integrated brake
- Speed reducer high efficiency
- Overload protection with variable frequency electronic drive
- Hand crank manual override

### ELECTRICAL

- Standard Versilis Control Unit for electrical motor control and battery charger function
- Product works on battery 12 V DC (AGM type); also used as power backup for communication hardware and arrow board operation
- Charger input can be a solar panel or an external power supply
- Typical external power supply consumption: 1 A at 120V AC or 0.5 A at 230V AC (other voltages available)

### COMMUNICATION INTERFACE OPTION

- Wireless (US 915MHz ISM band)
- Wire RS-485 interface
- Fiber optic

### HANDHELD RF REMOTE

- Wireless (US 915MHz ISM band)
- Approximate range of 1 mile in normal condition with line of sight

### CONTROL OPTIONS

Ability to mix and match control options for added operational flexibility and redundancy.

#### Local Control Options:

- Versilis handheld RF remote control
- Push buttons

#### Remote Control Options:

- Versilis Commander for NTCIP and WEB access over Ethernet
- PLC using dry contacts



Trailer Mounted Arrow Board  
Manual set up and dismantle



Automated SwiftArrow deployed



Automated SwiftArrow retracted

### ABOUT VERSILIS

Versilis takes pride in developing quality innovations and providing exceptional service. Everything we do is governed by three principles: quality, safety and efficiency. In an effort to meet the highest quality standards and respond to clients' evolving requirements, Versilis engineers work hard at continuous product improvement. For this reason, Versilis reserves the right to modify minor technical details listed in this product information sheet without warning.

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