



# PRODUCT OVERVIEW

## VANGUARD® VS-5360 VARIABLE SPEED LIMIT SIGNS

Daktronics Vanguard® VS-5360 Variable Speed Limit Signs (VSLs) are designed to be an integrated, enforceable, and affordable part of a traffic management system. The signs provide high legibility 18-inch digits that are easily changed as traffic and weather conditions change.

The VS-5360 features an active LED speed limit pixel matrix and a surrounding reflective 48-inch wide by 60-inch tall MUTCD-compliant static panel. The high-resolution LED pixel matrix allows clearly formed black digits on a white background that approximate the E-series fonts specified by the MUTCD. In freeway situations, the signs are nearly indistinguishable from static signs. All of this makes them more easily enforced than the amber VSLs seen in the market.

The signs use a blend of long-life red, green, and blue LEDs to create the white light used for the speed limit background. An integrated light sensor automatically adjusts the LED intensity for all ambient lighting levels. Under full sunlight, the LEDs match the reflectivity of the surrounding speed limit panel. At night, the LEDs dim to a very legible level that will not blind drivers and is not washed out by headlights. Our long-life LED technology is designed for a 100,000 hour life and consumes less than 300 watts at full intensity.

The VS-5360 is designed for the roadside environment and features a number of features typically found only in high-end Dynamic Message Signs (DMS). A forced-air ventilation system provides filtered air to keep the sign cool. Pixel diagnostics allow remote monitoring of the sign to ensure legibility, and the internal controller and mounting location for communication equipment eliminates the need for costly traffic cabinets.



The VS-5360 features a powerful NTCIP-compliant controller that integrates into nearly any traffic management system. The posted speed limit can be scheduled or controlled manually. The built-in logging function keeps track of all speed limit changes. Daktronics offers Vanguard software, which can control, configure, and monitor the VSLs, as well as any other NTCIP-compliant DMS.

The Vanguard VS-5360 VSLs are the best choice for a speed management solution. The signs offer the features needed, and allow the integration into any NTCIP-compatible traffic management system.

## KEY FEATURES

### Dynamic Sign Panel

- › Programmable matrix capable of two 18-inch (473mm) speed digits
- › Black digits on white background
- › Legible from greater than 1000ft (305m)
- › High-intensity LED technology
- › Wide 60-degree LED viewing angle
- › Minimum brightness of 12,400 cd/m<sup>2</sup>
- › Contrast-enhancing technology shields pixels from sunlight
- › Built-in pixel diagnostics monitor LED operation
- › Automatic brightness control using integrated light sensor
- › 20mm or 16mm pixel pitch available

### Static Sign Panel

- › 48-inch by 60-inch aluminum panel
- › MUTCD-compliant
- › Reflective white sheeting

### Cabinet Style

- › Lightweight all-aluminum construction
- › Front service access for easy maintenance
- › Forced-air ventilation system keeps sign cool
- › Mounts to existing poles (hardware not included)
- › Sealed IP65/67 components

### Control System & Diagnostics

- › Internal NTCIP-compliant controller
- › External controller (optional)
- › Automatic speed change logging
- › Manual or scheduled speed control
- › Available Vanguard control software
- › Reporting: pixel, fan, power supply (optional)

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## SPECIFICATIONS

### Dynamic Sign Panel Specifications

#### PIXEL MATRIX

- › 20mm - 32x48
- › 16mm - 40x60

#### PIXEL PITCH

- › 20mm - 0.78"
- › 16mm - 0.62"

#### ACTIVE AREA

- › 2'1" H x 3'2" W (634mm x 951mm)

#### MAX POWER 310 WATTS

Typical white text on black background: 100Watts

Typical black text on white background: 180Watts



### Static Sign Panel Specifications

- › MUTCD-compliant speed limit panel
- › 60" H x 48" W (1.52m x 1.22m) panel
- › Reflective white sheeting with black E-series lettering

### Controller Specifications

- › NTCIP-compatible controller
- › Compatible with cellular, fiber, Ethernet, and other communication devices
- › Controller mounted within cabinet
- › Option for external controller in roadside cabinet



### Design and Manufacturing Standards

- › NTCIP-compliant control system
- › Designed to AASHTO wind-load requirements
- › Designed to NEMA TS4 standards
- › Internal components IP65/67
- › Cabinet IP34

### NTCIP Communication Standards

- › NTCIP 1203 - DMS Objects

