

## TrainWise® Destination Sign



Product size and connectors may vary depending on configuration

The TrainWise® Destination Signs (SG03) provide clear, reliable and flexible on-board digital signage for destination information.

Superior visibility is achieved through super-bright dot matrix LEDs with full color display. Flexible content display options include adjustable scroll rate, adjustable brightness, and choice of character or font style.

The LED Destination Signs are designed for easy installation with a variety of mounting options and a wide operating voltage range for direct connection to the vehicle low voltage system

## Technical compliance

Railway standards	Compliant with IEEE and IEC rail design standards (including IEEE 16 and IEC60571/ EN50155) IEC 61375-3-4 Electronic railway equipment – Train communication network (TCN) – Part 3-4: Ethernet Consist Network (ECN)
Signage standards	Compliant with ICC ASC A117.1 Standard for Accessible and Usable Buildings and Facilities: 703.7 Variable Message Signs
Fire, smoke and toxicity	Compliant to 49 CFR Part 238.103 guidelines and NFPA-130

## Options

LED array size and pitch	Custom LED array sizes and alternate LED pitch configurations are available.
Serial interface	RS485 interface available for communication with central sign controller.

## Display

LED type	SMD Tricolor RGB
LED array	Large: 20 x 200 (4000 pixels) Medium: 12 x 112 (1344 pixels) Small: 12 x 32 (384 pixels)
Pixel pitch	7 mm
Brightness	1850 nit (Max)
Viewing angle	70 degrees

## Electrical interfaces

Power supply	1	Operating voltage range: 16VDC – 90VDC
Power consumption		Large: 132 Watts (Max) Medium/Small: 50 Watts (Max)
Light sensor	1	Front mounted ambient light sensor
LEDs	6	SMD tricolor RGB

## Communication

Ethernet ports	2	IEEE 1473 (Type E) Ethernet, 100 Mbps, M12 D-Coded
Protocol support	✓	Protocols included in IEC 61375-3-4 Electronic railway equipment – Train communication network (TCN) – Part 3-4: Ethernet Consist Network for Standard End Devices

## Mechanical characteristics

Dimensions	Large: 57.2 in x 7.6 in x 2.7 in (145 cm x 19 cm x 7 cm) Medium: 31.5 in x 6.7 in x 2.7 in (80 cm x 17 cm x 7 cm) Small: 10.9 in x 6.7 in x 2.8 in (27.7 cm x 17 cm x 7.1 cm)
Weight	Large: 18 lb / 8.2 kg (approximate) Medium: 10 lb / 4.5 kg (approximate) Small: 5 lb / 2.3 kg (approximate)
Connectors	Ethernet: 1 x M12 D-coded Vehicle Interface: MIL-DTL-5015/SAE-AS50151 circular connector or alternate as required
Ingress protection	Front: IP51 - Back / Top / Sides: IP50

## Environmental conditions

Operating temperature	-40°F to +158°F (-40°C to +70°C)
Storage temperature	-40°F to +185°F (-40°C to +85°C)
Shock and vibration	IEC 61373; Category 1, Class A
Dielectric withstand	1.15kVAC circuit to circuit and circuit to chassis

# Electromagnetic compatibility

Surge immunity	IEC 62236-3-2, Table 7
Conducted emissions	IEC 62236-3-2, Table 3, 4, & 5
Conducted immunity	IEC 62236-3-2, Table 7 & 8
Radiated emissions	IEC 62236-3-2, Table 6
Radiated immunity	IEC 62236-3-2, Table 9 (with RF susceptibility verified to 6 GHz)
Electrical fast transient	IEC 62236-3-2, Table 7 & 8
Electrostatic discharge	IEC 62236-3-2, Table 9