

Remotely Monitor Vehicle Switches and Temperatures

Fleet managers and dispatchers can gain valuable insight into the status of their assets in the field by using Trimble Sensor Connect, which automatically records and reports on changes in vehicle-installed switches or sensors. Trimble Sensor Connect reports can show, for example, when the temperature rises in a refrigerated truck or when a trailer door is opened or closed. Such information helps companies protect their assets and provide quality service. Trimble Sensor Connect, an optional service package for the Trimble GeoManager_{SM} Mobile Resource Management (MRM) solution, includes both Switch Status and Temp Status.



Key Benefits

- Delivery companies can verify proper delivery and protect cargo by monitoring trailer door opening and closing times and locations
- Carriers with temperature-controlled compartments can protect their loads with automatic compartment temperature monitoring
- Waste-collection companies can better resolve customer disputes with reports showing each time a truck's trash lift arm is used
- Tow truck managers can validate when and where a towing job started and stopped by monitoring when the lift goes up or down
- Dispatchers of street sweeping equipment can ensure service quality with information about each time and location that the sweeper broom moves up or down
- Companies can take proactive measures to protect their cargo or quality of service by receiving immediate notifications when sensor events fall outside defined parameters
- Fleet managers can monitor the idle time and APU usage to ensure drivers are minimizing fuel consumption

Trimble Switch Status

Trimble Switch Status enables monitoring of up to four independent transition events within a vehicle, such as Door Opened/Closed, Light On/Off, Tow Lift Up/Down or Street Sweeper Broom Up/Down. This service enables the Trimble iLM (Internet Location ManagerTM) in-vehicle hardware to monitor electrical signals from various switches or sensors in the vehicle, then send this information to the Trimble server for use in detailed GeoManager reports.

Using the web-based GeoManager application from the office or any location with Internet access, managers may review easy-to-read reports on the time, date and location where sensor transitions take place. Exception Reports deliver immediate text notification to a manager's PC or SMS-enabled mobile device if a sensor is triggered outside of defined parameters. Reports on sensor events can let a manager know, for example, when a cargo load was delivered, the location at which a tow was raised, or how many waste truck loads were picked up on a residential block. Such information helps companies improve management of their mobile assets.

Trimble Temp Status

Trimble Temp Status works in a similar way as Switch Status, using digital temperature data from a customized sensor that is installed in a temperature-controlled compartment of the vehicle. Temp Status is especially helpful for temperature-sensitive deliveries, such as food and chemical distribution, because it automatically provides periodic reports on compartment temperatures for vehicles in the field. Managers may receive immediate Exception Report notifications when the temperature of a vehicle compartment exceeds or drops below set thresholds. Such information can maintain the safety of temperature-sensitive chemicals, prevent cargo loss and help resolve customer disputes over spoiled goods.

Switch Status Specifications

Technology

- Monitors up to four independent contact-based electrical signals per vehicle
- Hold-off feature and signal debounce algorithm prevent retransmission of identical switch transitions
- GeoManager Reports and Exception notifications uniquely identify each vehicle's electrical signal, switch state or transition status (e.g., on to off, open to closed)
- RoHS (Restriction of Hazardous Substances) compliant

Environment

- Operating Temperature: -4° to +140° F (-20° to +60° C)
- Storage Temperature: -40° to +221° F (-40° to +105° C)
- Humidity: 0% to 95% RH, non-condensing

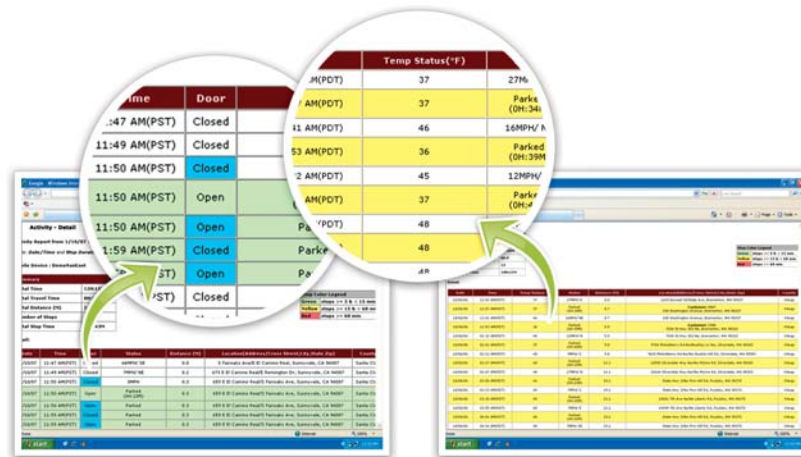
Temp Status Specifications

Technology

- Monitors one temperature status signal per vehicle
- Digital temperature sensor is installed in the vehicle and connected to the iLM in-vehicle hardware
- Reports temperature according to customer-specified reporting intervals or immediately by Exception
- RoHS compliant

Environment

- Operating Temperature: -40° to +158° F (-40° to +70° C)
- Temperature Reporting: Increments of 0.9° F (0.5° C)
- Accuracy: +/- 2° F (1° C)
- Humidity: 0% to 95% RH, non-condensing
- Water resistant



The GeoManager Activity Detail Report includes a column showing Switch Status events and/or Temp Status readings.

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