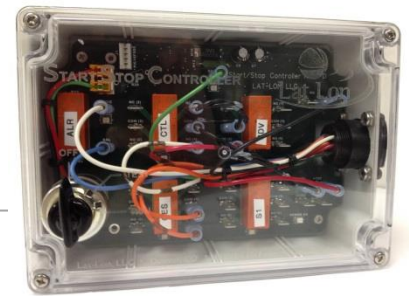




START STOP CONTROLLER SPECIFICATIONS



The Start Stop Controller is a key component of the Lat-Lon Automatic Engine Start Stop System, an interactive, real-time locomotive system for operators to control, monitor, and remotely set boundaries for their engines. The Start / Stop Controller works in conjunction with Lat-Lon's existing Locomotive Monitoring Unit (LMU2) and offers a complete solution to reduce idling fuel and maintain optimal starting parameters.

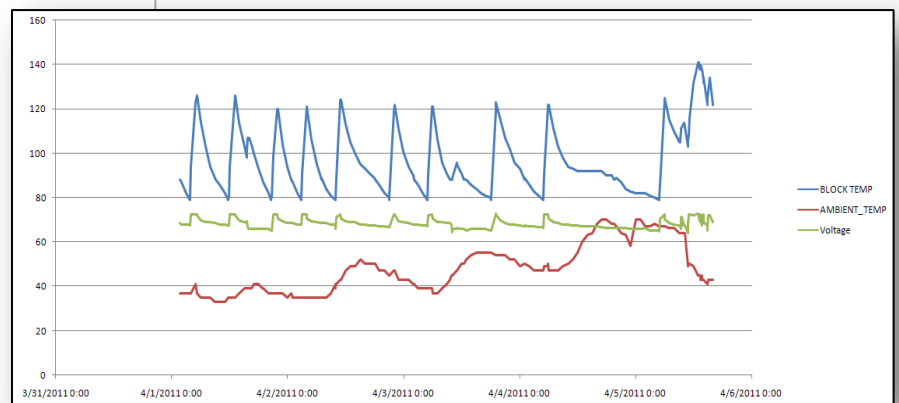
series of tests to see if any of the conditions are present to start. For example, if the water temperature is below the set threshold, then an engine start will commence. For stopping, ALL conditions must be satisfied. Both digital and analog inputs can be combined into the logic for starting and stopping.

LOGICAL, EASY TO OPERATE:

No conversion charts, no data tables required.

REMOTE: Make changes anytime from your computer, tablet, or mobile device, anywhere.

UNIFIED: Events change, and so does your business. Have control with the Lat-Lon AESS and update your start / stop parameters to suit your needs, in real-time. We are your unified business partner - always in sync.

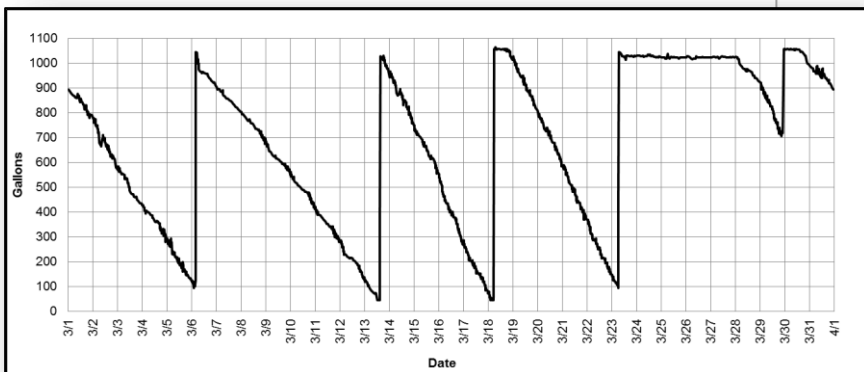


Block Temp, Ambient Temp, Voltage with Lat-Lon AESS System in Place

REDUCE IDELING FUEL:

Maintain temperature, pressure, and/or voltage as conditions to start/stop a locomotive in lieu of constantly running and burning fuel and profits. The starting logic is a

In addition to the analog and digital inputs, the Lat-Lon AESS System has a timer for maximum time the engine should be off and another timer for how long to run once all other measured conditions have been met for a shut down. All of these settings reside in the LMU2's memory and can be easily changed over-the-air via the Lat-Lon website. This allows the behavior of the AESS system to be seasonally adjusted either by individual locomotive or as a fleet. When the website is changed and the "Load Configuration" button is clicked, the settings are sent to the LMU2 via cellular communications and the LMU2 is updated within seconds.



*Actual Fuel Probe Readings for 31 Days
4,279 Gallons - 943.95 Miles - 5 Fueling Stops*





START STOP CONTROLLER SPECIFICATIONS

ADMINISTRATIVE TOOLS

Manage your units using our comprehensive Web-based Administrative Tools, available 24/7 from your computer.

WEB REPORTING SYSTEM

Turn data into actionable information with the powerful reporting functionality in our Web Reporting System. There is no software to install; all you need for 24/7 access to your password-protected account is an Internet connection. For a low monthly fee, you get unlimited access to data, reports, maps, weather, and dashboard displays.

APP

On the go? We have an App for that. Download the Lat-Lon App for Apple or Droid and view the status of your assets, quickly navigate to a locomotives location, or see exceptions to customized parameters.

ALERTS & ALARMS REAL-TIME

Get real-time information when you use Lat-Lon systems to monitor your assets.

- You configure the thresholds that trigger an alert. When sensors detect conditions outside those parameters, the system automatically sends an alarm message.
- Choose an email address or any mobile device for notifications. Every message includes detailed information so you are fully informed.

PHYSICAL SPECIFICATIONS*

SSC Dimensions: 6.75" x 4.75" x 2.25"
 LMU2 Dimensions: 7.50" x 5.50" x 2.50"

*Installation Location flexible to accommodate available space

OPERATIONAL SPECIFICATIONS

Data modem: GSM/GPRS or CDMA
 Power Source: 30 to 100 volt DC (Min/Max)
 Power Draw: 100 mA

Manage AESS

Unit Name: 856
Unit Id: 254360607587

AESS ACTIVE

Activate AESS

Deactivate AESS

Lock AESS Off

Lock AESS On

■ AESS ACTIVE

■ AESS INACTIVE

■ AESS LOCKED OFF

■ AESS LOCKED ON

■ AESS FAILURE

■ AESS STATUS CHANGE PROCESSING

Reasons to Start

Engine starts when ANY of these conditions are met.

When engine has been off for:	5 Days	0 Hours	0 Mins
Voltage less than	Not Used	00	
Coolant Temp less than	78 F	30	
Fuel Level less than	Not Used	00	
Ambient Temp less than	Not Used	00	

	Not Used	Energized / On	Unenergized / Off
Digital 1	⊙	○	○
Digital 2	⊙	○	○
Digital 3	○	⊙	○
Digital 4	○	⊙	○
Digital 5	⊙	○	○
Digital 6	⊙	○	○
Digital 7	⊙	○	○

Reasons to Stop

Engine stops when ALL of these conditions are met.

When engine has run for	30 min
Voltage greater than	Not Used 00
Coolant Temp greater than	130 F 63
Fuel Level greater than	Not Used 00
Ambient Temp greater than	Not Used 00

	Not Used	Energized / On	Unenergized / Off
Digital 1	⊙	○	○
Digital 2	⊙	○	○
Digital 3	○	⊙	○
Digital 4	○	⊙	○
Digital 5	⊙	○	○
Digital 6	⊙	○	○
Digital 7	⊙	○	○

Factory Settings

D10 Signals AESS Enabled: Yes

Deactivate AESS on Start/Stop Failure: No

AESS Logic Interval (sec): 60

Load Configuration

Cancel

Lat-Lon AESS Configuration Screen

