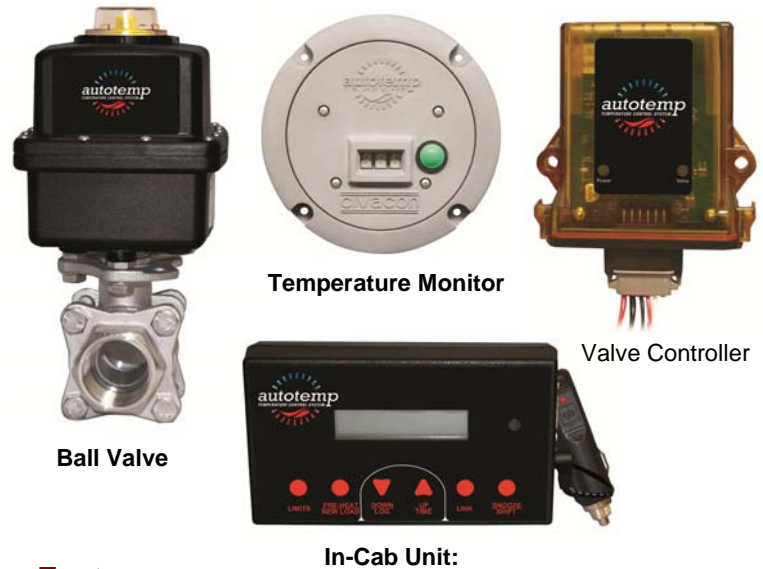PART NUMBER DS-07-13B

Rev. A, October 2013

AUTOTEMP from Civacon

A patent pending advanced digital, wireless monitoring and control system for in-transit temperature sensitive products. It features an in-cab display that keeps the driver fully informed, with updated temperature readings every 15 minutes. Optional set-point control can be added for long hauls requiring in-transit heat regulation.

Civacon's patent pending AUTOTEMP uses a solid-state digital temperature sensor to monitor the tank shell temperature and transmits the reading wirelessly to an in-cab receiver unit every fifteen minutes. Driver's can easily monitor the product temperature from the cab while driving; eliminating the time-consuming "stop and check" process of traditional dial temperature gauges. The display unit logs each time-stamped temperature reading and, with the addition of a handheld thermal printer, produce a detailed paper report. An audible alarm can alert the driver if the temperature goes above or below a pre-set range.

AUTOTEMP is also available with optional temperature regulating capabilities that can automatically control coolant flow to the tank's heat exchanger, forming a closed-loop system that will ensure a stable product temperature.

Temperature Monitor

Valve Controller

Ball Valve
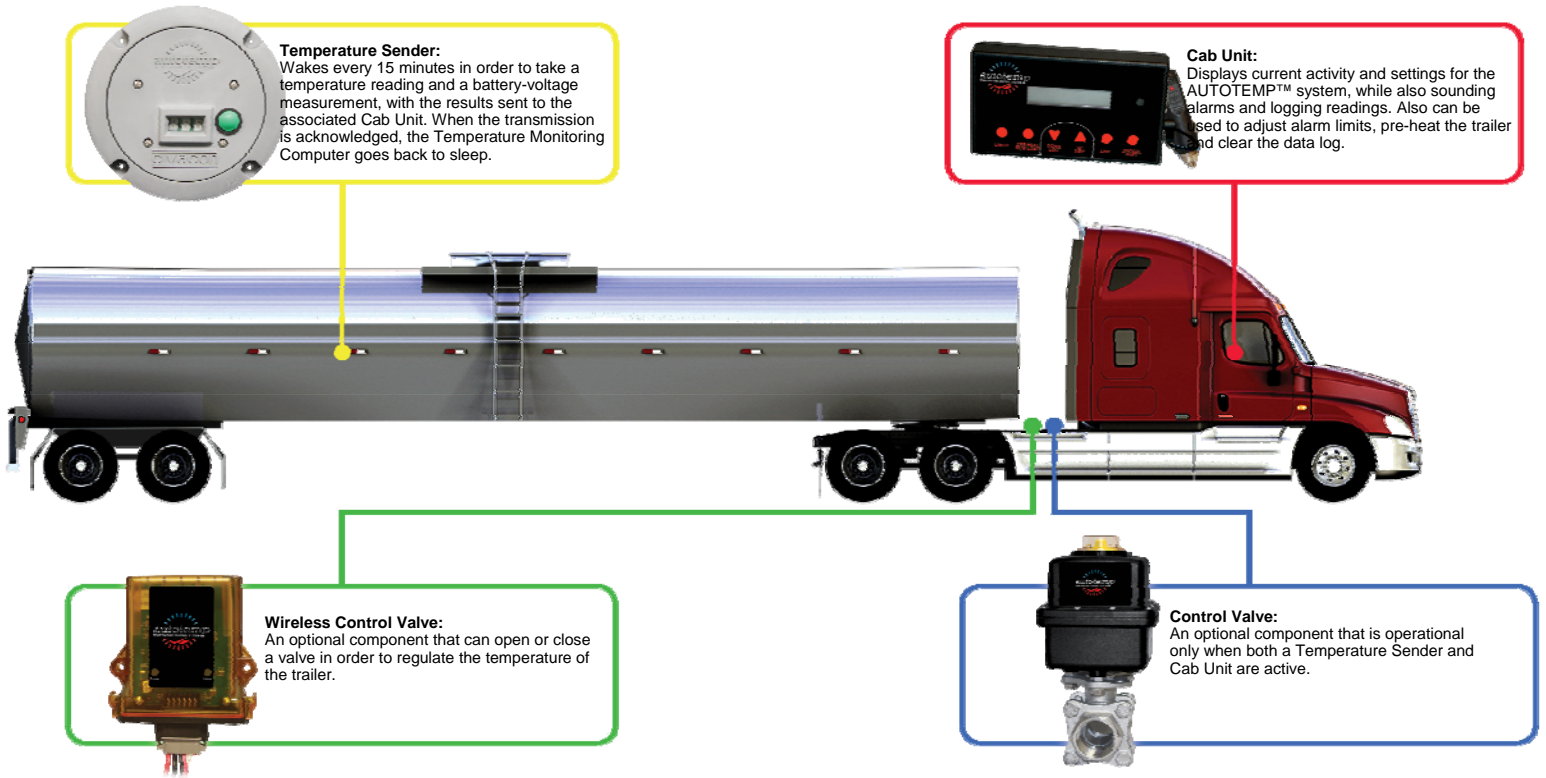
In-Cab Unit:

Features

- Solid-state digital Temperature Monitor wirelessly transmits tank shell temperature at adjustable intervals.
- In-cab unit receives and stores each temperature "transmission" Optional thermal printer can provide printed log output.
- Audible alarm notification if temperature goes above or below a pre-set range.
- Assures product integrity through constant monitoring "right in the cab" .
- Available with optional automatic regulating capabilities so temperature issues can be resolved easily and efficiently.
- Tracking and audit trail of load temperature re-assures the recipient that the load remained safe.

Ordering Specifications

TM100	Wireless Temperature Monitoring System Includes In-cab Unit and Temperature Monitor
TM101	Wireless Temperature Monitoring System. Includes In-cab Unit, Temperature Monitor and Printer
TM110	Wireless Temperature Closed-Loop Control System. Includes In-cab Unit, Temperature Monitor, Ball Valve and Valve Controller
TM111	Wireless Temperature Closed-Loop Control System. Includes In-cab Unit, Temperature Monitor, Ball Valve, Valve Controller and Printer

Temperature Sender:
Wakes every 15 minutes in order to take a temperature reading and a battery-voltage measurement, with the results sent to the associated Cab Unit. When the transmission is acknowledged, the Temperature Monitoring Computer goes back to sleep.

Cab Unit:
Displays current activity and settings for the AUTOTEMP™ system, while also sounding alarms and logging readings. Also can be used to adjust alarm limits, pre-heat the trailer and clear the data log.

Wireless Control Valve:
An optional component that can open or close a valve in order to regulate the temperature of the trailer.

Control Valve:
An optional component that is operational only when both a Temperature Sender and Cab Unit are active.

In-Cab Unit

The In-Cab Unit displays system settings, current activity, receives and logs temperature readings and has an alarm notification feature. Easily programmable by using the buttons on the front of the unit to create a link (pairing) with a Temperature Monitor, adjust alarm limits, pre-heat the trailer, clear the data log, adjust the clock and, control the audible portion of alarms. The buttons can also be used to display the radio signal strength and adjust the contrast of the display.

Product Specifications:

Part:
In-Cab Unit, 3601T
Dimensions:
3.25" x 6"
Materials:
Plastic Enclosure with Digital Display
Weight:
2lbs.
Temp. Range:
0° F to 150° F (0°C to 70° C)

Temperature Monitor

The Temperature Monitor takes a temperature reading every 15 minutes and sends the results to the In-Cab Unit. Once the In-Cab Unit acknowledges the transmission , the Temperature Monitor will hibernate to conserve battery life. The Temperature Monitor is typically awake for less than one half second per reading.

Product Specifications:

Part:
Temperature Monitor, 3602T
Dimensions:
5.84" OD
Materials:
Industry Standard Housing
Weight:
2 lbs.
Temp. Range:
-40° F to 150° F (-40°C to 70° C)

Controller/Ball Valve

The Ball Valve and Valve Controller are optional components. When added to the AUTOTEMP System the Controller opens and closes the Ball Valve to regulate coolant flow to the trailer's heat exchanger as directed by the In-Cab Unit.

Product Specifications:

Part:
Valve Controller 3603T , Ball Valve 3604T
Dimensions:
Valve Controller– 4" Mounting
Ball Valve **-** 5.75"
Materials:
Valve Controller – Sealed Plastic Housing
Ball Valve **-** Stainless Steel w/Teflon Seals
Weight:
5 lbs.
Temp. Range:
 -40° F to 150° F (-40°C to 70° C)