Quick Start Guide

OnSite Telemetry

Cellular Quick Start/Calibration Guide

Distributed by:

Chart Inc.

407 7th Street NW
New Prague, MN 56071 USA
(800) 400-4683

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Contents

Revision Log

Revision Level	Date	Description
A	06/03/2014	Original
B	11/07/2014	Reformat and add telemetry board installation section
C	03/01/2016	Update step 6 on page 6 to J23 (from J21).

Preface

General

OnSite Telemetry is a data monitoring system designed specifically for industrial gas distributors who are looking for a single platform for all their asset management needs. Its versatility allows the monitoring of Chart MicroBulk and bulk tanks, as well as high pressure cylinders and pressure lines. Customer benefits include reduced delivery charges and the elimination of gas run-outs. Distributors benefit from better customer service and improved distribution efficiency, as well as better asset utilization.

The OnSite Telemetry system is driven by three major sensors (tank gauges and pressure) that integrate seamlessly with multiple types of data transmission devices to service any installation economically. This web-based system is easy to use, allowing data to be retrieved by authorized users or customers anytime over the internet, and it's conveniently self-administered with credit management services through www.chartparts.com. Backed by Chart's service and Robertshaw's Centeron Webview™ proven telemetry platform, you can be confident your hardware and data will be supported and secure.

Highlights

- Simple tank set up downloads to program controller
- Flexible tank reporting schedule by accounts to control communication costs
- Customizable alert settings for level and pressure with e-mail, text messaging or fax communication
- Full administration rights to commission equipment and set up customer sites from any internet-access computer
- Multi-user access - set up employees, customer or suppliers
- Historical data reports with cost-saving analysis software
- User authorization levels from read-only to full system administration

Quick Start Guide

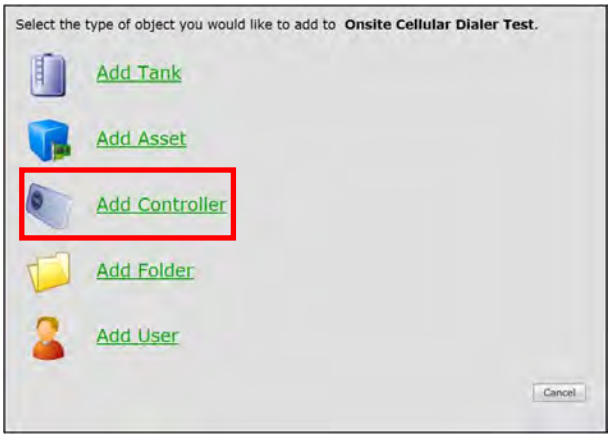
This OnSite Telemetry Cellular Quick Start/Calibration Guide covers the necessary steps to setup and calibrate a telemetry system using the "LINEAR CALIBRATED" calibration method on the OnSite Telemetry website.

The first portion of this manual covers setting up of the controller on the website. The next section covers sending calibration data from the sensor to the website and the final section will walk you through calibrating the website.

If after following the steps in this manual you have any questions regarding the setup and calibration, please contact Chart's Technical Service at 1-800-400-4683.

Setting Up the Controller on the Website

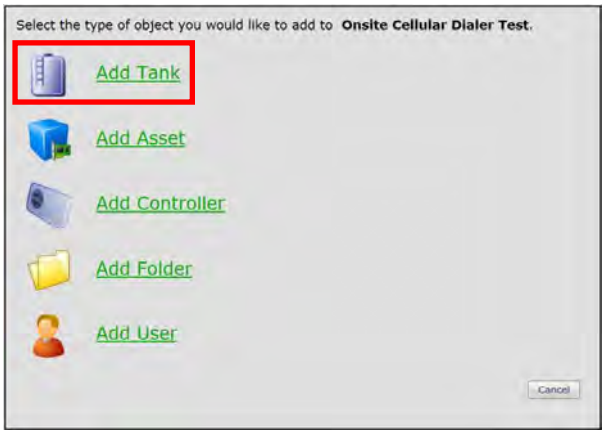
1. Locate the serial number on the telemetry board.
2. Log into the OnSite website (http://webview.centeron.net/chart.aspx)
3. Add a new folder for the account by pressing the  button in the top left corner of the screen.
4. After adding a folder, click on ‘Add Folder’ and type in the folder name. Hit save then press add object button at top to add a new controller to the folder.
5. Add a new controller to the folder by pressing the ‘Add Controller’ button.



6. A new screen will pop up and ask you to ‘Enter Controller S/N’. Enter the number in the space provided and press ‘Continue’.

7. A new screen will appear which will give you access to the call settings of the controller. For now press the ‘Save’ button at the bottom of the screen to save the controller setup.

8. Add a tank to the folder by following the same steps for a controller but press the ‘Add Tank’ button instead.



9. Select the controller which you just added in the ‘Controller S/N’ drop down menu near the top of the page.

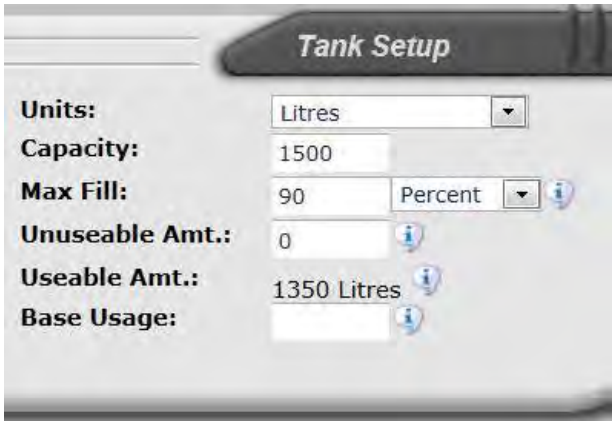
10. Enter the tank name in the ‘Tank Name’ section.
11. Select a product from the ‘Product’ drop down menu. This should be the same product which is in the tank.
12. In the ‘Tank Type’ drop down menu select ‘Linear Calibrated’.

Note: *The offset calculation calibration will still work if you are more comfortable with this method.*

13. The center of the screen will change and should now look like this.

14. Set the desired units using the ‘Units’ drop down menu.

15. Enter the capacity of the tank in the ‘Capacity’ box. In this example we are setting up a 1500 liter Perma-Cyl® tank.



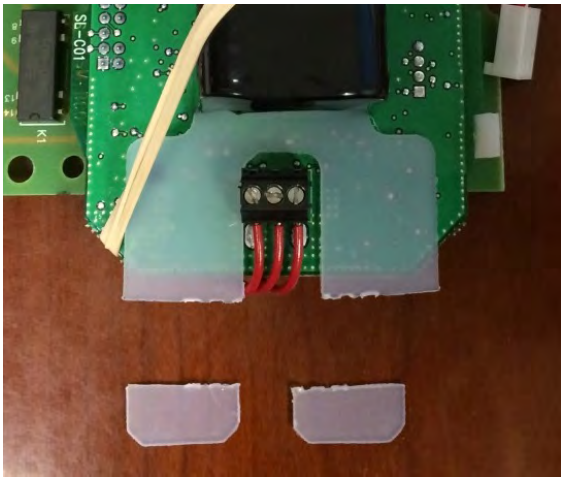
16. Click on the Save button at the bottom of the screen. This will save the tank setup.

17. At this point the tank is setup on the website but not calibrated. In order to calibrate the system some readings need to be taken. Continue on to the following section to take two readings from the tank to calibrate the system.

OnSite Telemetry Board Installation

The following instructions explain how to install the OnSite Telemetry board in the Cyl-Tel®/Tank-Tel® Liquid Level Gauge housing.

1. Approximately 3/8” of the clear plastic support will need to be cut off the cellular board for it to fit into the Cyl-Tel/Tank-Tel housing.



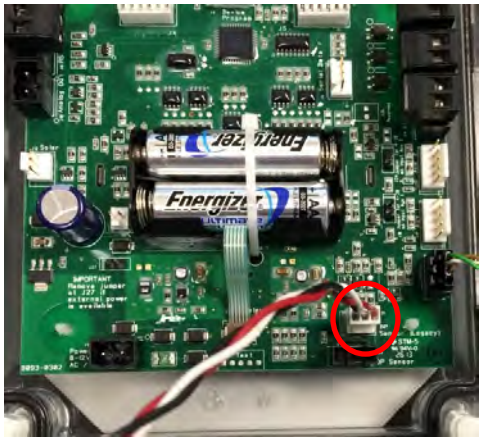
2. Align the cellular board in the Cyl-Tel/Tank-Tel housing as shown in the pictures below. Align the three mounting holes circled in the picture.

3. Secure the cellular board using the three enclosed mounting screws.

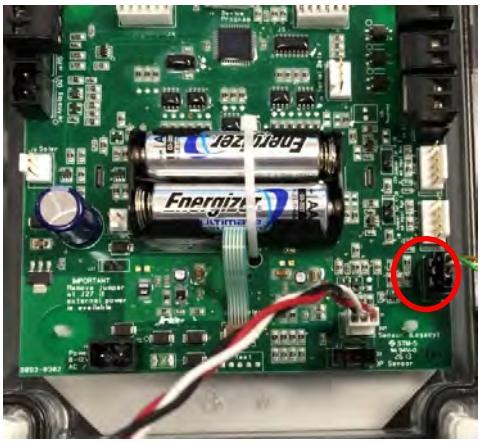
4. Plug the differential pressure sensor wire into the J1 port on the telemetry board.

5. Plug the battery wire into the mating connector next to the battery.

6. Plug the twisted wires into the J23 port on the Cyl-Tel®/ Tank-Tel® board.



7. If equipped leave the pressure sensor plugged into port J18 on the liquid level gauge board.



At this point the board is installed and ready for taking readings to calibrate the system.

Sending Readings for Calibration

Once the telemetry board installation is complete, follow these steps to send readings to the website for calibration.

1. Make sure the Cyl-Tel® Liquid Level Gauge is setup correctly by following the steps in the Cyl-Tel & Tank-Tel® Quick Start Guide.

2. Put the tank in “Equalization Service” mode using the gauge isolation valve above the Cyl-Tel gauge.

3. If your tank does not have the gauge isolation valve shown above then certain steps need to be taken to protect the sensor from damage. Otherwise proceed to Step 4.

   a. If your tank has isolation valves and a separation equalization valve then this is the valve operation procedure:

      - Close isolation valves.
      - Open equalization valve.

   b. If your tank has NO isolation valves then the tank must either be empty or the Cyl-Tel gauge must be removed from the tank.

4. Press the “ON” button to turn on the Cyl-Tel gauge display.

5. At this point the Cyl-Tel gauge reading should be 0% full.

   a. If the Cyl-Tel gauge does not read 0% full at this point then it needs to be DP Zeroed.

   b. Follow the steps in the Cyl-Tel gauge manual to zero the sensor.

6. Do a magnet strike for the website to take a reading. Swipe the magnet near the edge of the board, inside the circled area on the picture below. You are looking for a glass tube, right on the edge of the back side of the top board. This is a magnetic switch which triggers a manual call.

7. On the back side of the board there is a red LED that will flash. This means the system is transmitting the data.

8. After a few minutes, put the tank in “Normal Operation” mode using the valve above the Cyl-Tel® Liquid Level Gauge.

9. If your tank does not have the equalization valve shown in Step 8, certain steps need to be taken to protect the sensor from damage. Otherwise proceed to Step 10.

   a. If your tank has isolation valves and a separate equalization valve then this is the valve operation procedure:

      • Open the isolation valves

      • Close the equalization valve

   b. If your tank has NO isolation valves then the tank must either be empty or the Cyl-Tel liquid level gauge must be removed from the tank.

10. Press the “ON” button to turn on the Cyl-Tel gauge display.

11. Write down the % full reading on the Cyl-Tel gauge for later use.

    a. For best results calibrate the system as close as you can to when the tank is filled.

12. Do a magnet strike for the website to take a reading.

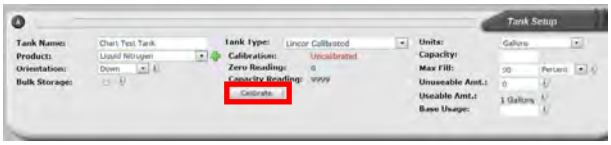
13. At this point the website should have two readings. The first is the zero reading, and the second will be the reading at the level the Cyl-Tel gauge displays.

14. The website calibration can now be done by following the steps in the following section.

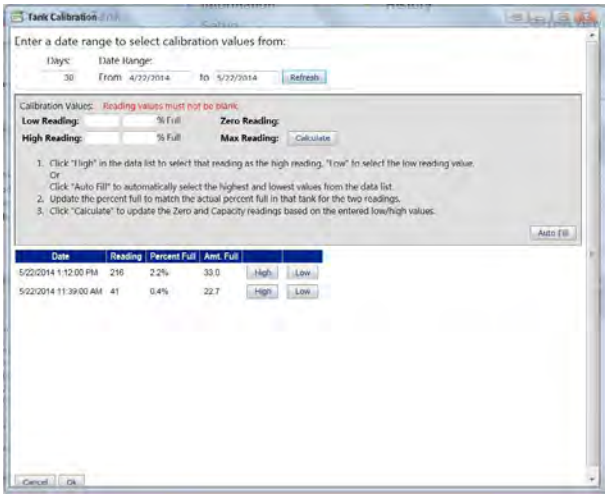
Calibrating the Website

The following steps can be used to complete the calibration of a new install or re-calibrate a system already in operation.

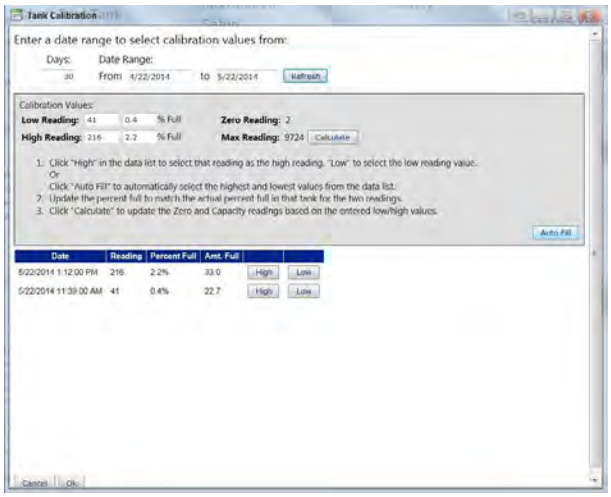
1. In the website (http://webview.centeron.net/chart.aspx) browse to the specific tank you wish to calibrate.
2. Select **Setup** at the top of your screen.
3. Click on the "Calibrate" button.



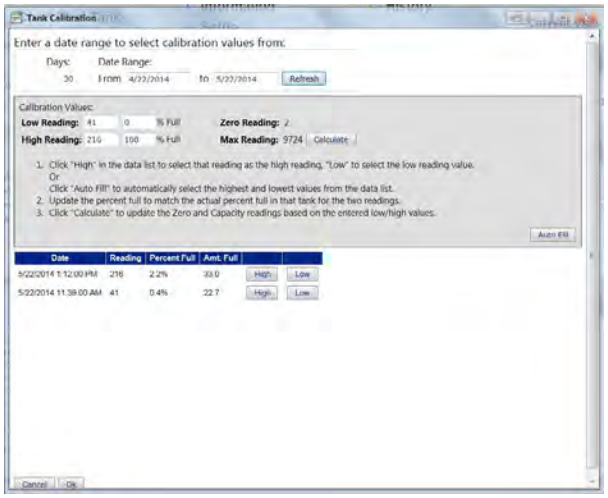
4. A new screen will pop up. It should look similar to the screen below.



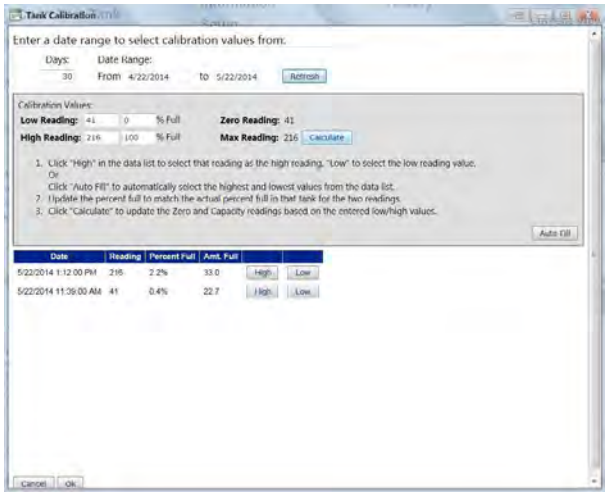
5. Click on the Auto Fill button. This button will automatically place the lowest reading in the 'Low Reading' box and the highest reading in the 'High Reading' box.



6. The 'Low Reading' and 'High Reading' should correlate to the two magnet strikes you did out at the tank.
7. The 'Low Reading' values will correspond to the tank at 0% full so they will be the lowest readings on the list.
   a. In this example the tank is 0% full when the 'Reading' is 41
8. The 'High Reading' values will correspond to the tank level you recorded while you were at the tank.
   a. In this example the tank is 100% full when the 'Reading' is 216
9. You will notice the % full values are not correct. This is because the system is not calibrated yet. Correct the % full numbers to read what the Cyl-Tel® Liquid Level Gauge read.



10. Once the values have been entered, press the Calculate button. This will change the calibration of the website. Notice how the 'Zero Reading' and 'Max Reading' change in the screen below.



11. Press the Ok button at the bottom of the page. This applies the new calibration. The screen should now look like this:

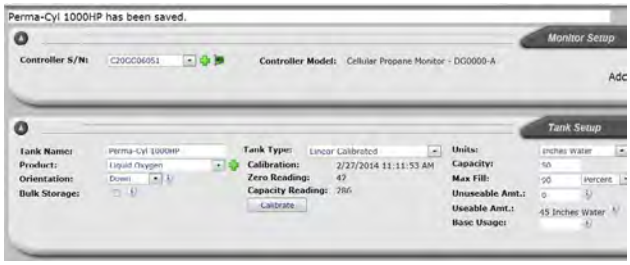
12. The ‘Zero Reading’ is the reading your tank will be at when it is empty.

13. The ‘Capacity Reading’ is the reading your tank will be at when it is full.

14. At this point the ‘Calibration’ line will say PENDING .

15. Press the Save button at the bottom of the page to save the calibration.

16. If the save is successful the screen should look like this:



The date and time of the calibration will be saved.

17. The system is now calibrated. Give the website 5 - 10 minutes to go through and change the tank capacity values.

18. Check back the next day to make sure the calibration is saved and working correctly.

If for any reason, you experience issues while installing or calibrating a system, please contact Chart Technical Support at 1-800-400-4683.