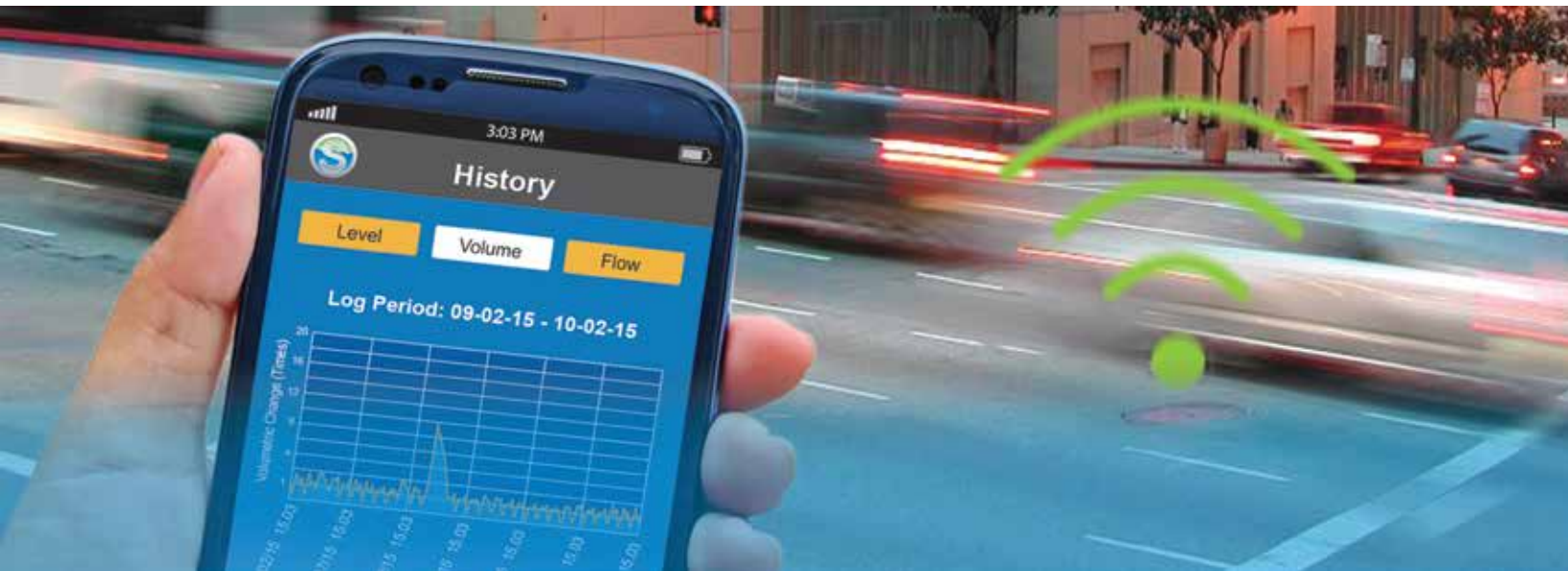


SewerWatch™

INSTRUCTION MANUAL

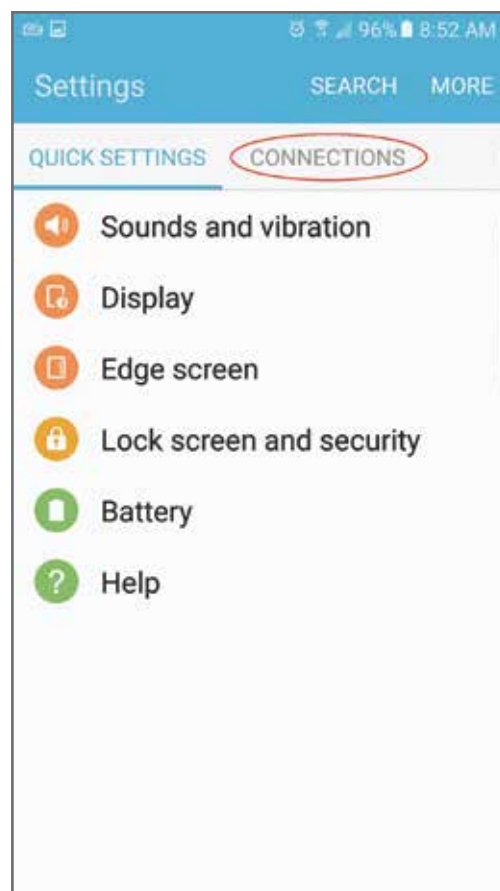


Connect to SewerWatch® via your iPhone®, Android® Device, Laptop or Tablet.

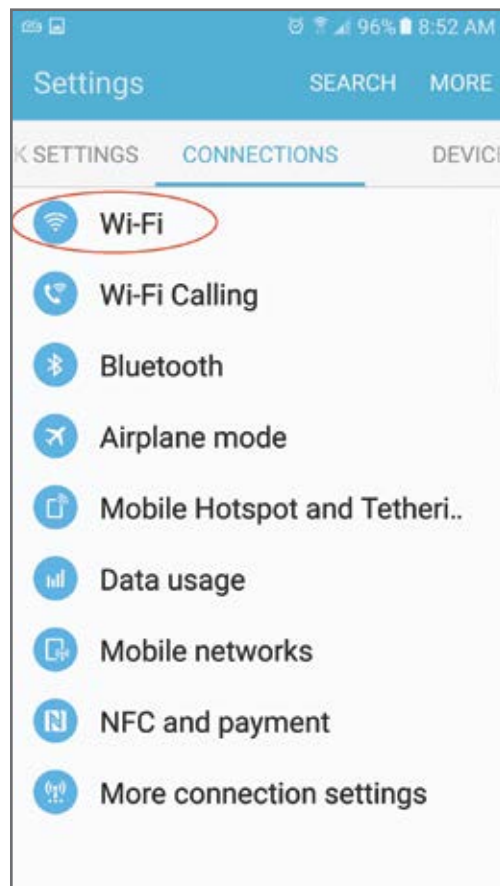
1. Go to “Settings” on your smart device either by clicking on the “Settings” icon or using the drop down menu.



2. Click on the “Connections” tab.

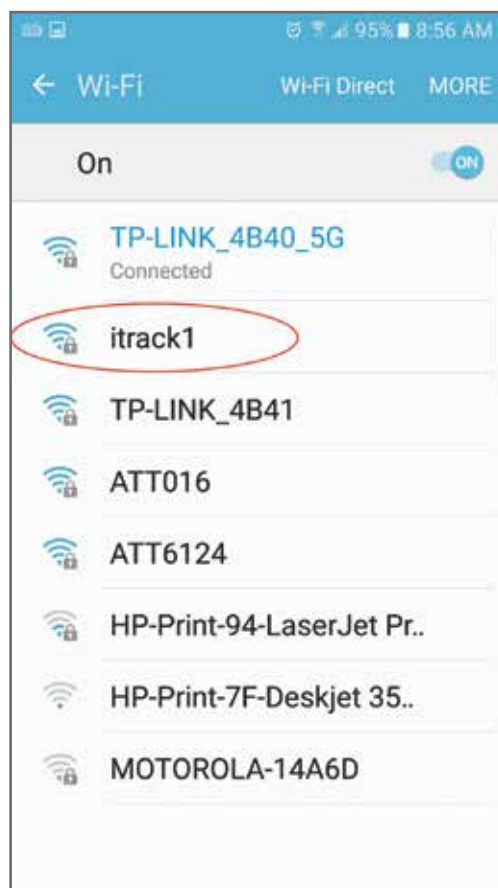


3. Click on “Wi-Fi”.



4. Click on the iTracker network “Itrack1”. The “Itrack1” password is “00000000” or 8(0’s). Once the iTracker is installed in a manhole, the Wi-Fi network only broadcasts a Wi-Fi signal once every 5 minutes for a period of 1-minute. It is during this one minute broadcast period that you are able to connect to the iTracker (See IOM, Pg. 7, Para. 3-5). If one has difficulty connecting to the iTracker during the 1-minute broadcast period, move to another position in relationship to the manhole in which the iTracker is installed. There may be interference in the area preventing a secure connection. Each time one changes their position and tries to reconnect, make sure to click on the “refresh” button. Smart devices are always attempting to conserve energy and will go back into “sleep mode” unless “refresh” is periodically initiated. If the 1-minute broadcast period expires prior to your

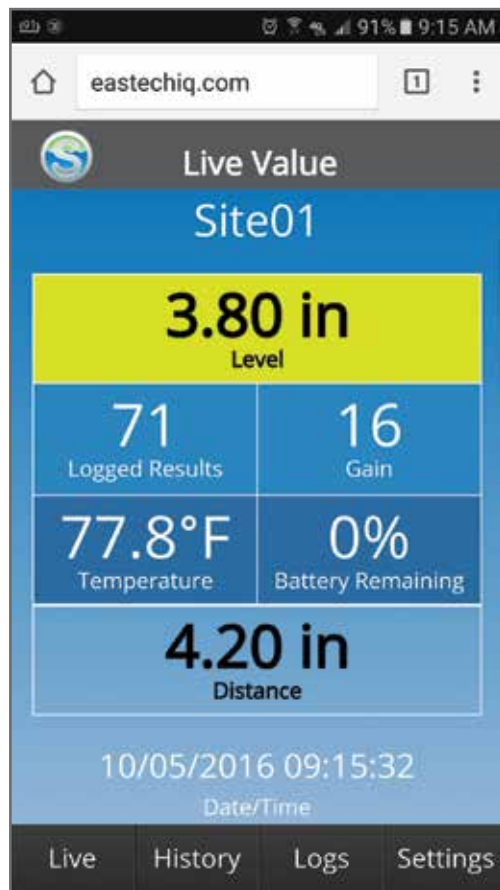
making a secure connection, watch your smart device to see when the next 1-minute broadcast period appears which should be at every 5-minute interval.



5. Upon successful connection to the iTracker, connect to one of the following recommended browsers; Safari® for Apple® devices and Chrome® or FireFox® for Android® devices.



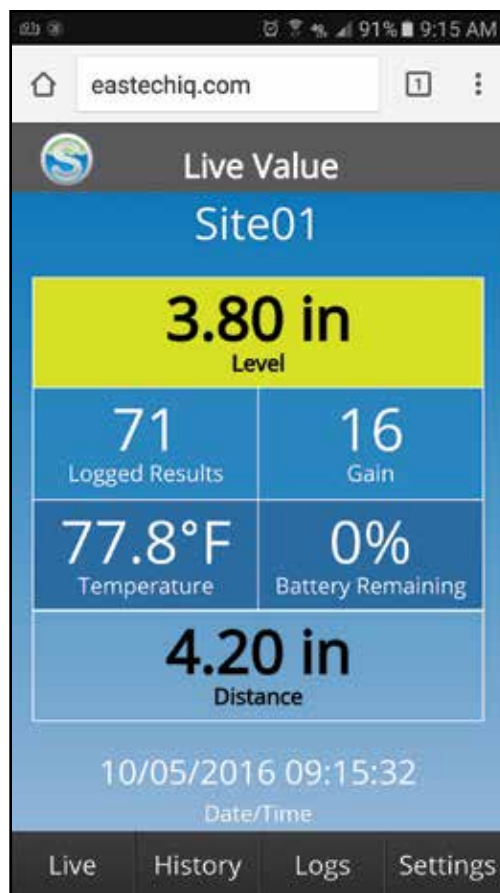
6. Input the web address www.eastechiq.com into your chosen browser. The “Live Value” page will appear on your smart device, laptop or tablet. If for some reason you have inadvertently connected to the Internet instead of www.eastechiq.com , a “Help” page will automatically appear on your device. The “Help” screen is pictured on the next page (Page 8) of this booklet.



7. Browser Connection “Help” Screen.

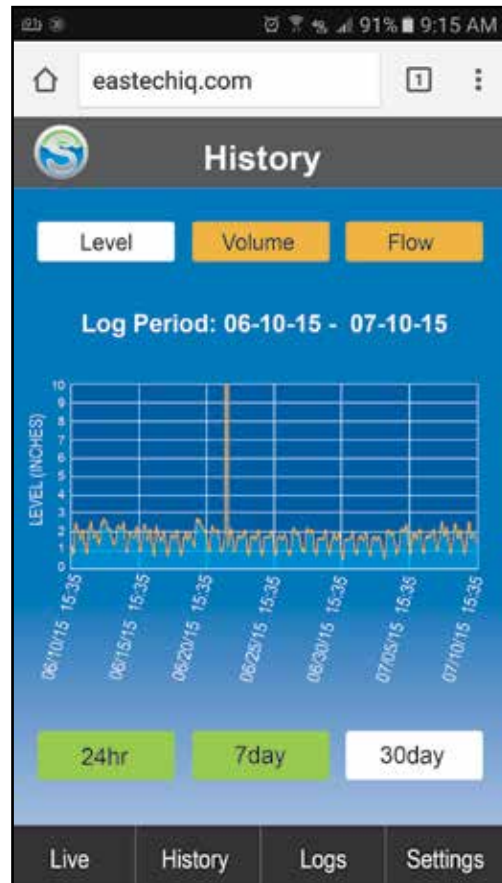


8. Upon successful connection to www.eastechiq.com, click on the “History” tab located at the bottom of the “Live Value” page. The History pages provide 24 hour, 7-day or 30 day histograms of Level, Volumetric Change in simple ratio form, or Flow in GPM. *Important: A full 24 hours of data must be collected before graphs can be generated by the SewerWatch App.*



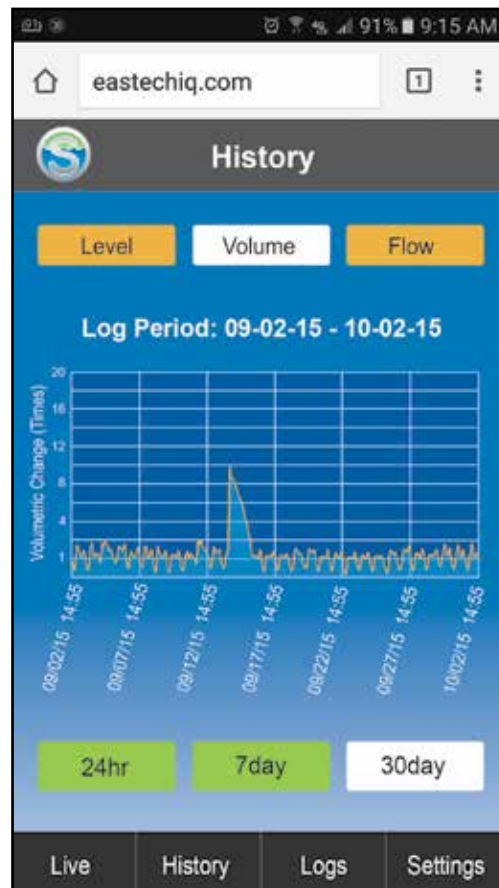
Level

The SewerWatch® App provides the ability for field personnel to walk up to any sewer having an iTracker® installed within it and simply by connecting to the iTracker's integrated web server with any smart device and clicking on "Level", one gains access to the last 24 hours (1 day), 7-days or 30 days (selectable at bottom of graph) of recorded Level data. This information is useful for "Fast-tracking" the performance of the manhole in question as it relates to overflows, basement backups, inflow&infiltration and capacity issues.



Volume

“Volume” is a calculation of the volumetric change in wastewater flows graphed as a ratio comparing the average dry day volumes for the period in relation to all other recorded flows. Comparison of average dry day volumes to wet weather events allows for a quick and simple analysis of collection system performance relating to issues of inflow and infiltration (I&I). The average dry day is designated as “1” on the history graph while all other flows are compared in terms of ratio metric increases or decreases. As one can determine from the example provided below, the average dry day volume of wastewater is represented on the graph by the factor “1”. During a wet weather event on 9/14/15, the volume within that segment of the collection network increased 10 times quickly confirming the presence of I&I.



Flow

“Population” on the “iTracker Setup” screen (figure 1) is the Population Modeling method by which all measurements recorded by the iTracker are converted to actual flow in Gallons per Minute. This procedure is not required if all one is interested in is ascertaining Level Change within the collection network or Volumetric Change but if actual Flow in Gallons per Minute is a requirement on the SewerWatch® App, one of the two following Population Modeling methods is recommended.

a. Ascertain the number of residences (homes) in the area served by the collection system being measured and insert that number in the box labeled “Population” on the “iTracker Setup” screen (Click on “Settings” on the “History” screen to go to the “iTracker Setup” screen). 182 gallons per day of average water usage per residence (confirmed by the US EPA, USGS and AWWA) will automatically be contributed to the SewerWatch® App for “Flow”.

b. Collect and total the monthly water bills for each residence, commercial facility, business, school, etc. within the area being served by the collection network under investigation by the iTracker. Divide that total by the number of days in the month and then divide that number by 182. In this way, the water bill totals are converted to a corresponding number of residences discharging an average of 182 Gallons per Day into the collection network being analyzed by the iTracker. The corresponding number of residences should now be inserted in the box labeled “Population” on the “iTracker Setup” screen. (See “iTracker Setup” screen Page 13)

Flow

Similar to the “Volume” graphs “Flow” is now presented in Gallons per Minute (figure 2).

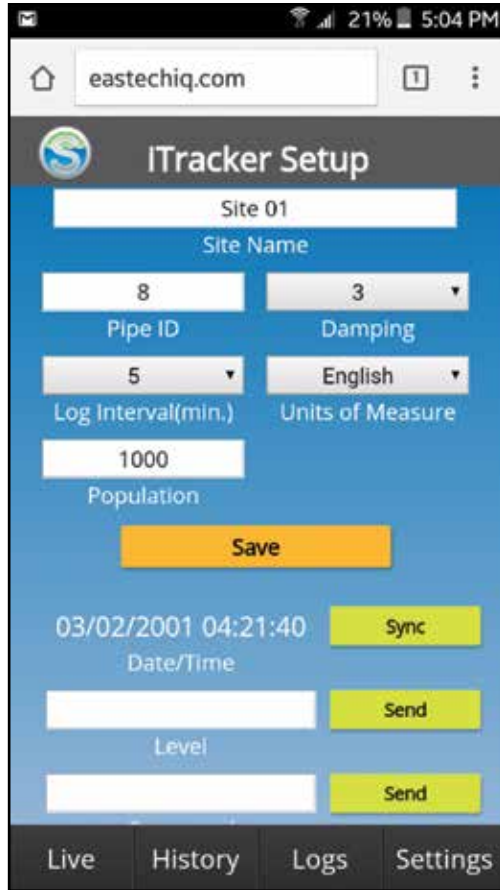


Figure 1

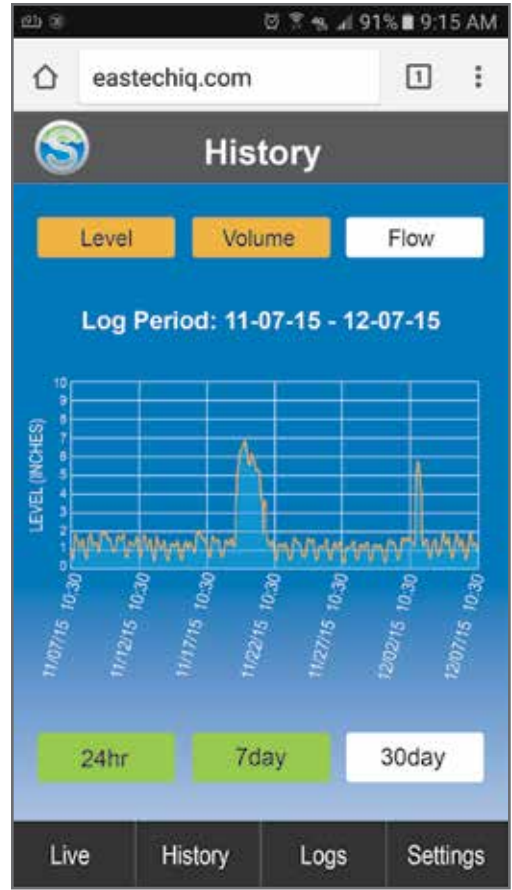


Figure 2

Technical Specifications

Enclosure	IP68 Submersable
Material	Marlex 9018 HDPE
Dimensions	14" x 2.25"
Weight	2.2 lbs.
Temp. Rating	32 to 160 degrees F
Battery	Tadiran 3.6 volt "D" cell x 2
Output	Wireless 802.11 B/G/N Webserver with SewerWatch application USB port
Logging Rates	5 to 60 minutes (selectable)
Accuracy	.1" or 0.1% of target distance, whichever is greater



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