

# SutronWIN

## Customized Web Hosting & Data Visualization



### Overview

#### Sutron Weather/Water Information Network

- ▶ Real-Time Web Hosting, Data Processing, Delivery, Storage & Alarms!
- ▶ Real-Time Web Service for Hydro-Meteorological Data Collection, Dissemination & Display
- ▶ Direct Data, Warnings & Control via the Web, in Any Format You Want, Ready to Use
- ▶ Reliable Data On-Demand, Event-Triggered & Scheduled via SMS, EMAIL or ON-LINE

SutronWIN, our advanced web service for hydro-meteorological data collection, handles the complexity of retrieving data from many different types of interfaces. Then, SutronWIN delivers collected data to you via the web in the format of your choice, ready to use.

SutronWIN collects data transmitted via the following:

<b>Satellite</b>	GOES DCS, DOMSAT, NOAAPORT, Iridium, Meteosat, GMS
<b>Modem</b>	Contact station on schedule, or station calls our control center
<b>IP-Accessible</b>	Contact static IP on schedule, or station connects to us via dynamic IP
<b>Cellular</b>	GPRS/GSM Modems

<b>Radio</b>	Line-of-Sight, Repeaters
<b>Serial</b>	Direct Connection, Multiplexer, Terminal Server, Etc.

Next SutronWIN processes data according to your specification, and delivers it via the web. SutronWIN will decode the data into time-tagged engineering units, store it up to 10-years in an SQL database, run computations for derived parameters and perform automated limit-checking.

SutronWIN provides a secure web-page for users to view their data graphically, on a map or in tabular and report forms. Easy-to-use links are provided for downloading data in many commonly used formats such as SHEF, .A/.E, Kisters ZRXP, CSV/TSV, Excel, Hydstra, USGS STDMSG, HTML, XML, Pi Historian, etc.

Conversely, if you prefer to do your own processing, SutronWIN delivers raw data (as it is transmitted by the station) using a dedicated, secure download page, updated immediately as your data arrives.

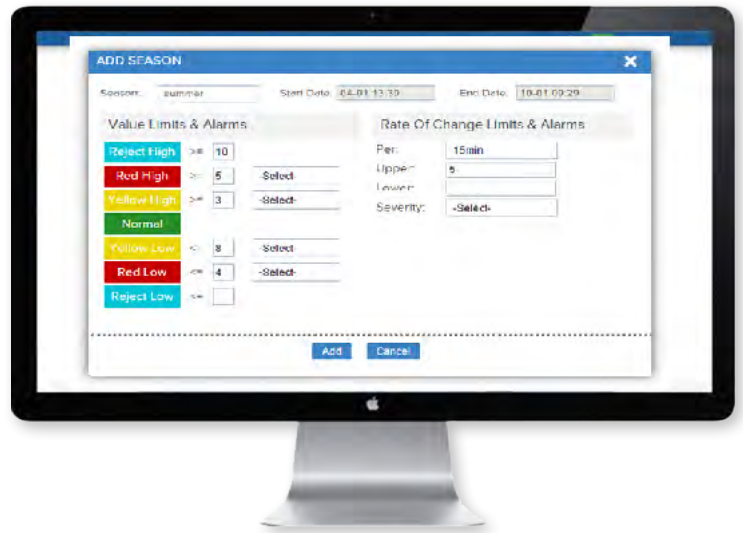
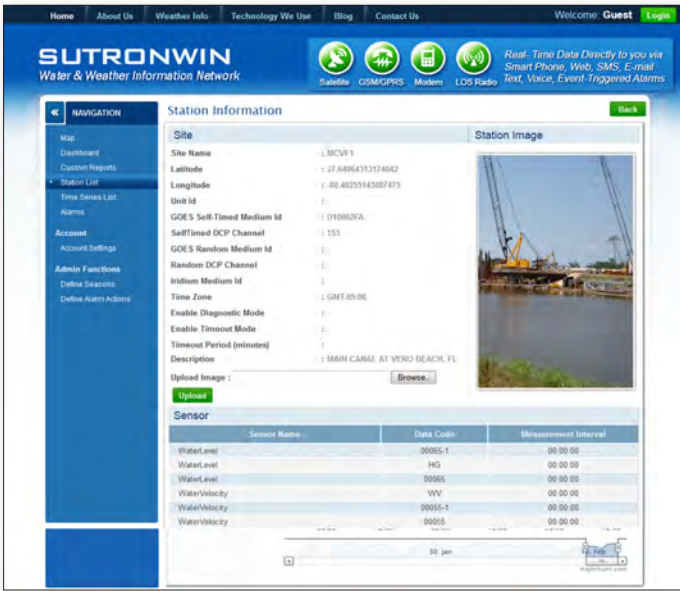
### Features

- ▶ **Derived Parameters:** combine parameters (e.g. add with coefficients), USGS Stage/Flow Rating Calculation, Periodic Averages, Incremental Precip, Sum, Min/Max, etc.
- ▶ **Limit Checking:** Value and rate-of-change limits. Separate limits can be set for warning/critical levels.
- ▶ **Alarm Notification:** Out of limit conditions can trigger special actions such as email or SMS messaging.
- ▶ **Voice:** Standard and User-Customizable
- ▶ **Applications:** All Hydro-Met Applications & Stations including existing systems, upgraded or new stations & systems
- ▶ **Pricing:** SutronWIN is very affordable whether handling data from a single station or a system of hundreds. There is a one-time setup fee and low recurring fees per station. Communication services (i.e., GPRS, Iridium) also incur costs from the cellular or satellite communications provider. Please contact us for a customized quotation by visiting our web site.
- ▶ **Back-Up On-Line Data, Storage and Analysis at No Additional Cost**
- ▶ **On-Line Web Hosting Options:** Through the SutronWIN web site or customized pages that fit into your existing or new web site

### Live Demo Available

Interactive Google Map Displaying Station Sites, Station Data and Station Plot





- ▶ **Data available via web interface pages** in SutronWIN or via your own customized web pages using your own branding and integrated with your own web site.
- ▶ **Storage:** GOES data is stored on the NESDIS server for 72 hours. Sutron receives all **GOES data transmitted** using our own ILEX Tempest LRGS and local ground station, Therefore, we store all GOES data, in addition to your station data, and keep it available as long as you specify.
- ▶ **Secure password protected log-in**
- ▶ **Real-time data access from anywhere in the world**
- ▶ **GOOGLE map that shows the location of each Hydro-Met Station**
- ▶ **Dynamic Alert Bubble** showing current data, date and time. On-click it changes from green to red or yellow based on **Received Alerts**.
- ▶ **Data downloads and reports in tabular or graphical format**
- ▶ **Demo Site:** <http://www.sutronwin.com/htm>
- ▶ **Great back-up for Critical Gage Alarm Notification for Federal/State Govt.**
- ▶ **Stores data for up to a year, minimum 90 days.** (NESDIS stores raw messages for only 72 hours.)
- ▶ **Page Displays:**  
*Current/Historical Alarms*  
*Graphical/ Tabular Reports*  
*Reports by Site/Region/Time Series*  
*Link to Download Data in Excel Format*  
*Link to GOES DCP Monitor*  
*Link to LRGS Receiver Status*

**Ordering/Licensing**

9400-0400	SutronWIN Client Set Up (1-time fee for new Web Account)
9400-0401	Custom Starter Page (optional)
9400-0402	SutronWIN Station Set Up (1-time fee per new station)
9400-0403	SutronWIN per Station Annual Fee for first 10 Stations
9400-0404	SutronWIN Service Discounted Recurring Fee for Stations 11-20
9400-0405	SutronWIN Service Discounted Recurring Fee for Stations 21-30
9400-0406	SutronWIN Service Discounted Recurring Fee for Stations 31-50

**What's Included**

- ▶ We provide all Receive Site & Server Hardware.
- ▶ We activate the modems & satellite equipment. Activation of communications can be a big problem for most users.
- ▶ We distribute real-time data seamlessly to PCs, iPhones, Blackberries, etc.
- ▶ We will develop a custom web page just for your data on SutronWIN or match your current web page styles, banner, etc. to fit into your own site.
- ▶ We provide a Google map or static map showing all your station sites.
- ▶ We automatically perform limit checking for all your monitored parameters & derived parameters to determine if any alarms or warnings need to be issued based on your designated limits.
- ▶ SutronWIN will automatically generate alarms when your limits are triggered. Additionally, your authorized staff can generate alarms to be sent to designated personnel on demand.
- ▶ Automatic alarms can be sent via voice messages, email messages & SMS.
- ▶ In maintenance mode, raw data messages can be sent to your cell phone, etc.

Click here to see current weather conditions through the SutronWIN demo site.  
<http://www.sutronwin.com/sutron/>

# SutronWIN - How It Works



1. We collect data from your Hydro-Met Station(s), *from Existing, Upgraded & New Systems*, by Satellite, GSM/GPRS, Radio, Modem, Cellular, etc.

1.

2.

3.

4.

5.

6.

We process the data according to your specifications & decode it into time-tagged engineering units.

We store the data for 6 months\* in our SQL database. And, we perform automatic computing of derived parameters & **automatic limit checking**.

\*up to 10 yrs. for an additional cost

Then we deliver. We provide a secure web-page to view your data graphically, on a map or in tabular form.

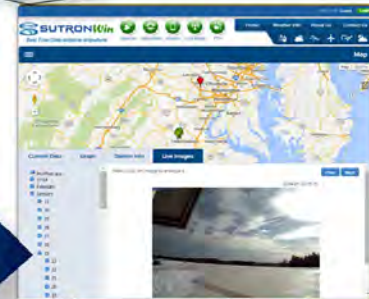
And, links to download data in any format: SHEF, A/E, Kisters ZRXP, CSV/TSV, Excel, Hydstra, USGS STDMSG, HTML, XML, Pi Historian, & many others.

Your messages, data, reports & alarms are delivered to your Desktop, Laptop, Smart Phone, Cell Phone, etc. Data is also available on demand by anyone you authorize, anywhere at all.

Limit Checking, Alarm Notifications, Voice & Data Messages, E-Mail, SMS, Web Cam Images, Tabular Data, Graphs, Station Maps, Derived Parameters, History, Diagnostics



SutronWIN Servers



\* We will also deliver raw data as it is transmitted by the station if you prefer to process your own data. We will provide a secure download page which is updated immediately as your data arrives.