NS-PHMS

Nick's Software

PH Monitoring System
Web Based Graphical User Interface

Overview

▸ **NS-PHMS** is a wireless, flexible and scalable PH monitoring solution

▸ Using **NS-PHMS** you can monitor PH in the lab, soil, low ionic and ultra-pure water, high PH solutions, samples containing heavy metals, hydroponics/aquaponics, beef, wine and other liquor, food safe

Overview

Using of the shelf components we lower your costs (acquisition and maintenance)

▸ System is using Raspberry PI3 as single board computer

▸ PH sensors are:
  ◦ High Precision Atlas Scientific sensors
  ◦ Outstanding long-term stability
  ◦ Factory Calibrated

▸ Sensors can be changed without replacing the whole unit (reuse the Raspberry Pi)
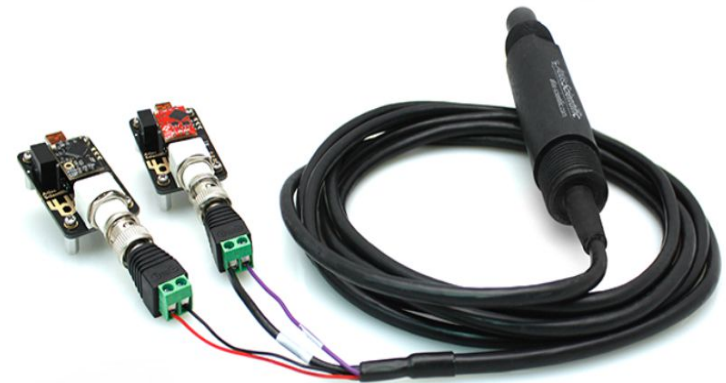
Easy to setup

▸ Sensors are using your existing Wi-Fi network to send data to the server

▸ Sensors are configurable and take measurements at time intervals from 1/second to 1/day

▸ Sensors can be accessed and configured remotely via VNC
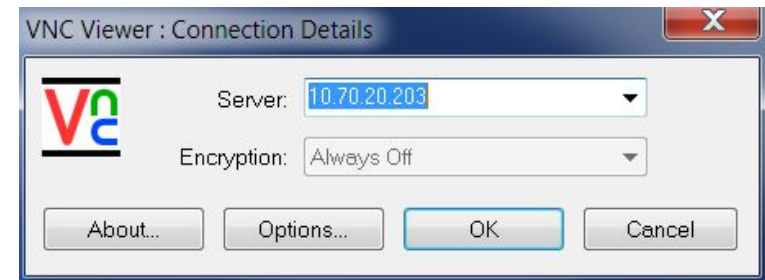
Email and SMS Notifications

- Sends emails and/or SMS notifications when PH measurements are out of range
- Easy to configure the list of who needs to be notified
- Everything is done through the user friendly web based interface

PH MONITORING 2.0   PH Monitoring⏷   DB Admin⏷

custom   ✕ 🔍   ⚙⏷   👤 Nick Niculita

🏠 / DB Admin⏷ / Email Notifications⏷

Add new   Delete   Displaying **1 - 1** of **1**   20 ▾   🖨⏷

		Name	Email
✏🔍	☐	Nick Niculita	**custom**db@nicks-software.com

Security

▸ Multiple user levels

▸ Easy to update and reconfigure

▸ Configure user rights for each screen and function

Responsive Web Design

▸ **NS-PHMS** has been developed using Bootstrap, the most popular HTML, CSS and JS framework for developing responsive, mobile first experience on the web

▸ Responsive design fits on any screen

▸ Mobile App gives you great advantage and improves your productivity
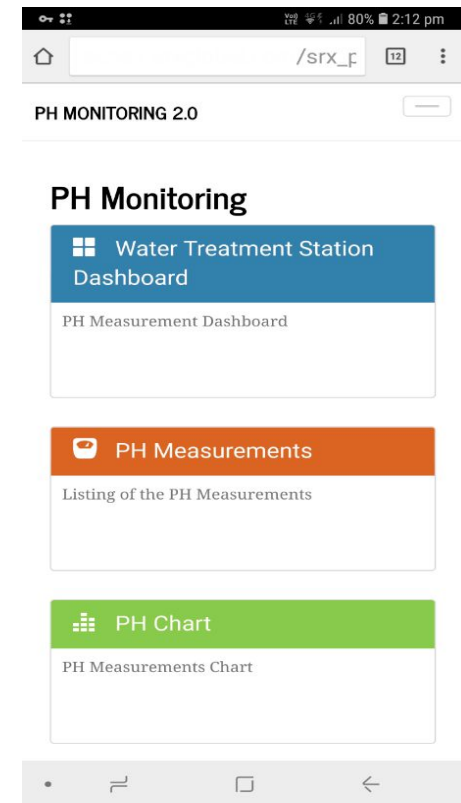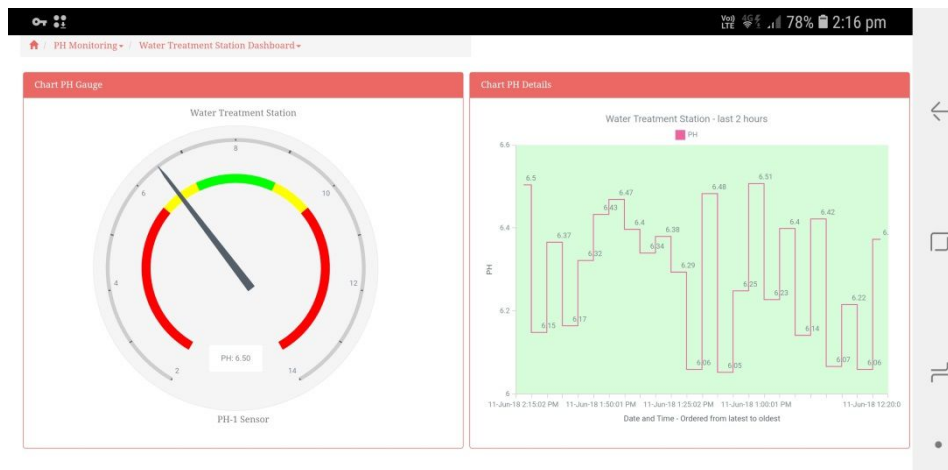
Main Features

▸ All features can be accessed from Main Screen that loads after a successful login.

PH MONITORING 2.0   PH Monitoring▾   DB Admin▾

PH Monitoring

Water Treatment Station Dashboard	PH Measurements	PH Chart	Web Reports
PH Measurement Dashboard	Listing of the PH Measurements	PH Measurements Chart	Create your own Charts and Reports

Main Features – Advanced Search

- ▸ Easy to search by
  - ◦ Sensor
  - ◦ Date & Time
  - ◦ PH Measurement
  - ◦ Multiple Search Operators (Contains, Equal, Not Equal, Empty, Between, More than, Less Than, etc.)

Tbl Ph - Advanced search

Ph Measurement	Contains ▾	
Sensor Name	Contains ▾	
Time Stamp	Equals ▾	📅

[Search] [Reset] [Back to list]

🏠 / PH Monitoring ▾ / PH Measurement ▾

[Add new] [Delete] [Update selected]   Displaying **1 - 100** of **86772**   100 ▾ 🖨▾

|	☐	Ph Measurement	Sensor Name	Time Stamp ↓
✏🗹🔍	☑	6.39	PH-1	11-Jun-18 11:45:01 AM
✏🗹🔍	☐	6.15	PH-1	11-Jun-18 11:40:01 AM
✏🗹🔍	☐	6.15	PH-1	11-Jun-18 11:35:01 AM
✏🗹🔍	☐	6.47	PH-1	11-Jun-18 11:30:01 AM
✏🗹🔍	☐	6.06	PH-1	11-Jun-18 11:25:01 AM
✏🗹🔍	☐	6.39	PH-1	11-Jun-18 11:20:01 AM
✏🗹🔍	☐	6.25	PH-1	11-Jun-18 11:15:01 AM
✏🗹🔍	☐	6.01	PH-1	11-Jun-18 11:10:02 AM
✏🗹🔍	☐	6.41	PH-1	11-Jun-18 11:05:01 AM
✏🗹🔍	☐	6.22	PH-1	11-Jun-18 11:00:02 AM
✏🗹🔍	☐	6.04	PH-1	11-Jun-18 10:55:02 AM

Main Features – Charts

▸ PH data can be also displayed as a chart. Information can be filtered based on Sensor Name and Time Stamp of the measurement
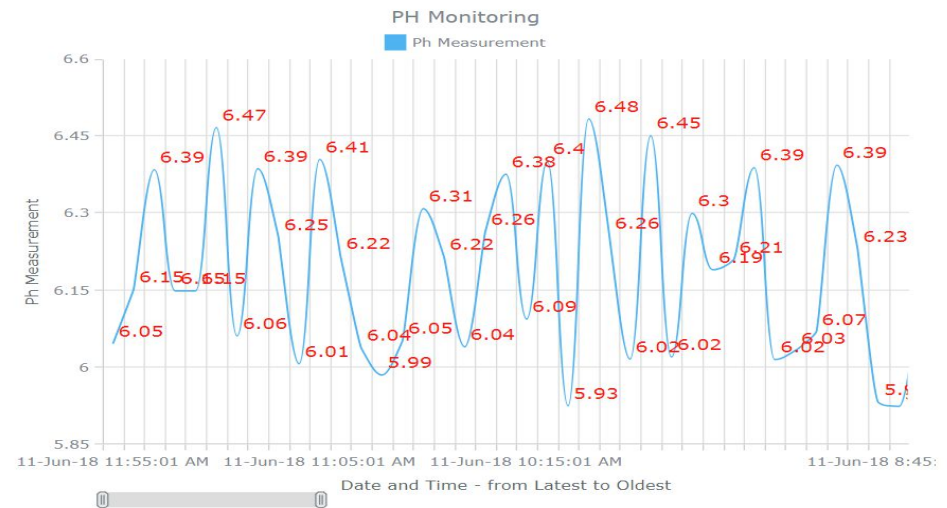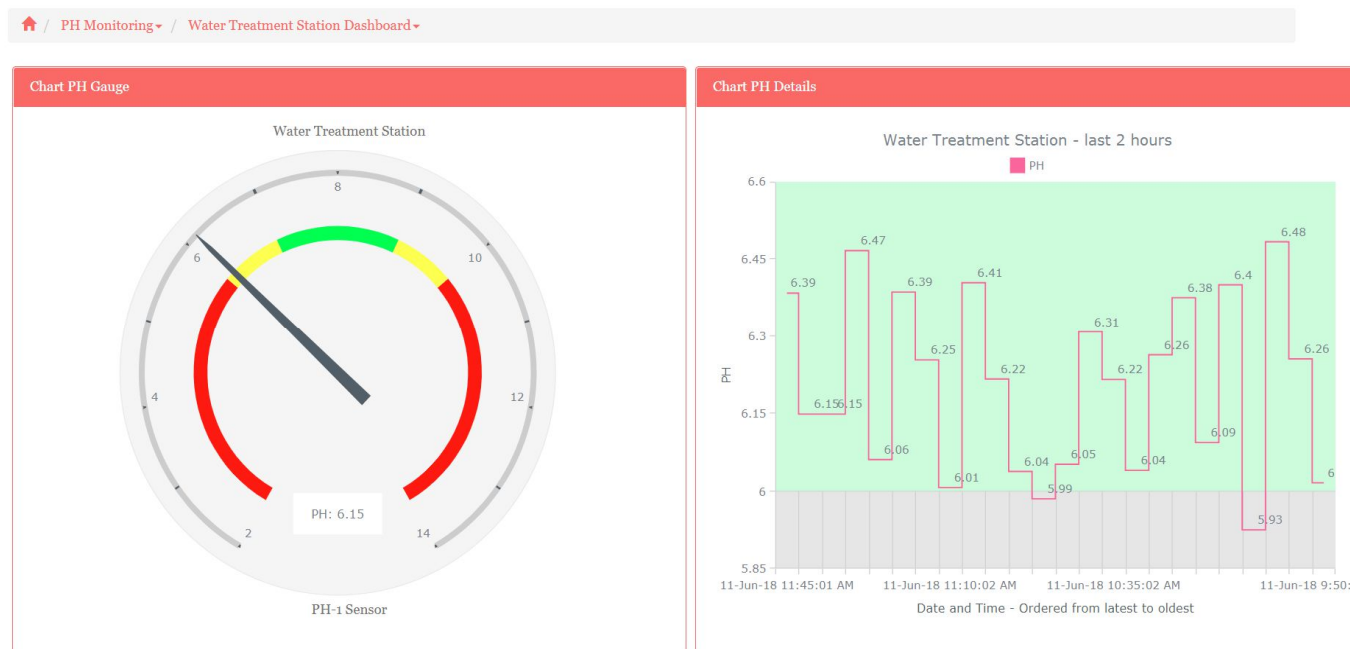
Main Features – Dashboard

▸ The dashboard displays multiple charts on a single page, making very intuitive the interpretation of the collected measurements

Main Features – Web Reports

▸ Customise and create your own charts and reports using Web Reports

Main Features – Alarms

▸ Fully Searchable Alarms Log

▸ Alarms ordered descending by Date and Time

Tbl PH Alarms - Advanced search

Date And Time	Equals ▾	▾	▾	▾	📅
Sensor Name	Contains ▾			
PH Measurement	Contains ▾			
Message	Contains ▾			
Lower Limit	Contains ▾			
Upper Limit	Contains ▾			

Search   Reset   Back to list

Add new   Delete   Displaying **1 - 20** of **83**   20 ▾   🖨▾

		Date And Time ↓	Sensor Name	PH Measurement	Message	Lower Limit	Upper Limit
✏🔍	☐	11-Jun-18 10:50:02 AM	PH-1	5.99	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 10:05:01 AM	PH-1	5.93	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 8:50:01 AM	PH-1	5.93	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 8:45:01 AM	PH-1	5.92	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 8:20:01 AM	PH-1	5.99	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 8:15:01 AM	PH-1	5.92	PH out of range	6.00	10.00
✏🔍	☐	11-Jun-18 7:40:02 AM	PH-1	5.95	PH out of range	6.00	10.00

Main Features – Admin

▸ Add, Edit or Delete:
  ◦ Sensor Name
  ◦ Location
  ◦ PH Offset
  ◦ Lower Limit
  ◦ Upper Limit
  ◦ Comments

▸ Admin functions should be available only for users with higher access levels. These settings are critical for good functionality of the whole system.

Main Features – Admin

- New users can be added from Admin Web Page
- Users can be also created from login page by clicking on **Sign Up** link
- Or Active Directory can be used and then you login with your Windows credentials

Login	
Username:	hniculita
Password:	••••••••••
	☐ Remember me
	Sign in Login as Guest

Admin:AD users and groups   ×

search 🔍   Add selected

	☐	Username	Display name	Category	Email
Add	☐	IIS_IUSRS	IIS_IUSRS	Group	
Add	☐	Cryptographic Operators	Cryptographic Operators	Group	
Add	☐	Network Configuration Operators	Network Configuration Operators	Group	
Add	☐	Performance Monitor Users	Performance Monitor Users	Group	

Thank you!