

E-APP-ANDM

ENVIROMUX Application for Android Phone or Tablet

Operating Instruction

The E-APP-ANDM (APP) is a custom NTI Android Application for connecting to E-MICRO-TRH(P) to view real-time sensor values and alert statuses of sensors/digital inputs/IP devices.

Features:

- Display individual or group sensor values at a configurable scan rate – updated in real time.
- Configure display options and sensor display scan time
- Operating system required: Android 4.1 Jelly Bean (or later).
- Compatible with E- MICRO-TRH(P) (with firmware version 3.2 or later).
 - The APP supports an unlimited number of E-MICRO units. However, it is necessary to configure the APP to allow a minimum 3 second period for the polling rate for each connected E-MICRO unit
- The APP has 8 customizable dashboards. Customer can choose which E-MICRO units and which sensors from each to show on each dashboard.
- The sensors can be edited and displayed in either summary mode or individual mode.
- Alarms are reflected real time in the APP, and can be dismissed or acknowledged.
- The E-MICRO unit name, network settings and time settings can be configured in the APP.
- A refresh button is available to synchronize data in the APP.
- Access to the APP can be password protected.

Limitations:

- Cannot add IP devices/cameras. (however the user can edit already connected IP devices/cameras)
- Cannot set alert/smart alert. (however the user can dismiss or acknowledge existing alerts)
- Cannot check logs.
- Cannot change SNMP settings, email server settings or user settings
- The "Web Server Type" (can be set in **Administration -> Network**) of the E-MICRO unit has to be set to "HTTP". HTTPS is not supported.

Installation

Copy the E-APP-ANDM to your Android tablet or phone from your PC. (If your Android phone or tablet has email setup, save the file emailed to you (*app-andm-v1-0.apk*) directly to your download folder and install it from there. However you get it to your tablet or phone, navigate to the file and install it. After installation you will have an application called "ENVIROMUX" in your list of programs.

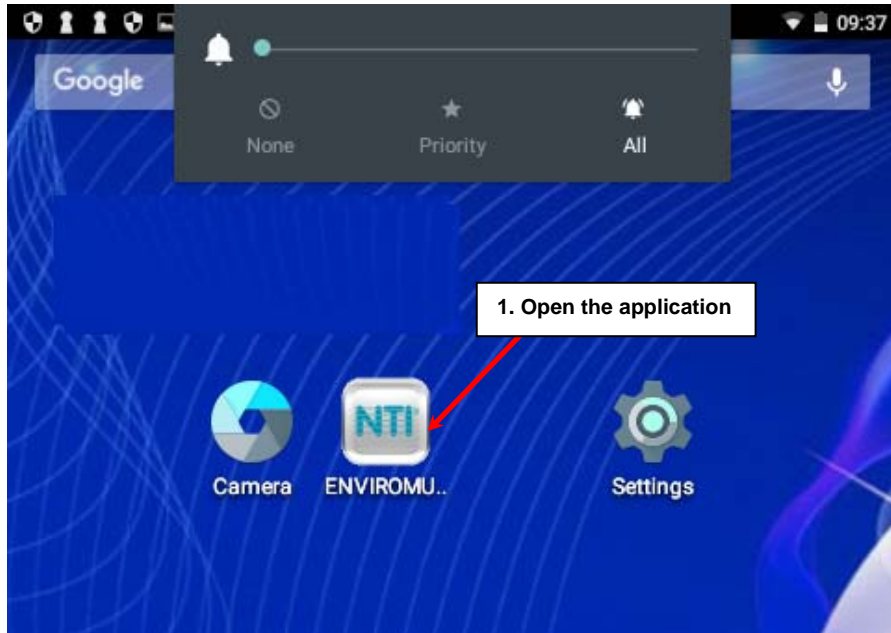
In order to connect to E-MICRO-TRH(P) units, your Android device must be on the same subnet as the ENVIROMUX units. The "Web Server Type" (can be set in **Administration -> Network**) of the E-MICRO unit must be set to "HTTP" (which uses port 80). HTTPS (port 443) is not supported.

Note: Your Android device can connect to the E-MICRO-TRH(P) units even if it is on a different subnet provided your gateway/router is configured properly to allow it. To configure this, you will need to contact your network administrator for assistance.

You can install the APP on one android device per application purchase. If you reset the phone or tablet to default settings, the APP can be reinstalled on the same device. The APP license is automatically enabled upon installation.

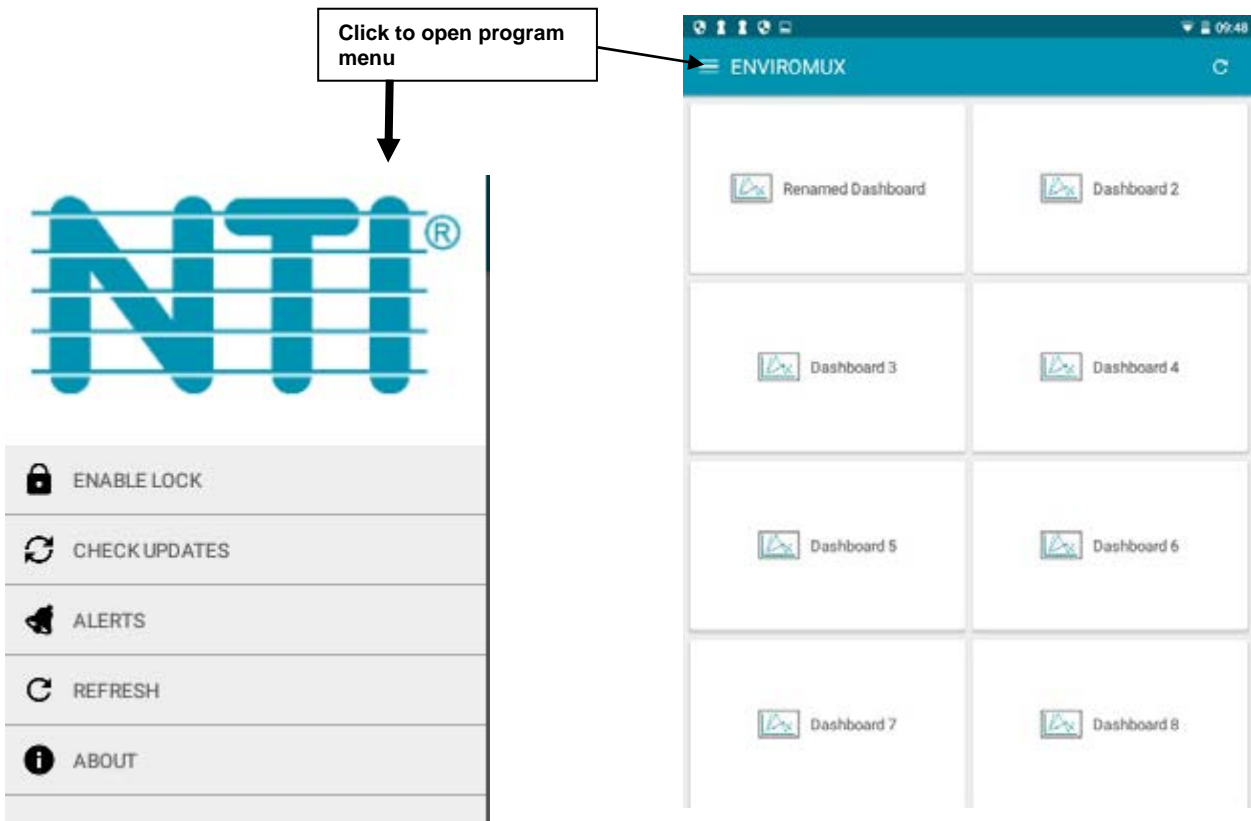
Configure the APP

1. Open the NTI “ENVIROMUX” application on the tablet (or Droid phone). In the image below (next page), a shortcut to it has been placed on the home screen for quick access.



1. Open the application

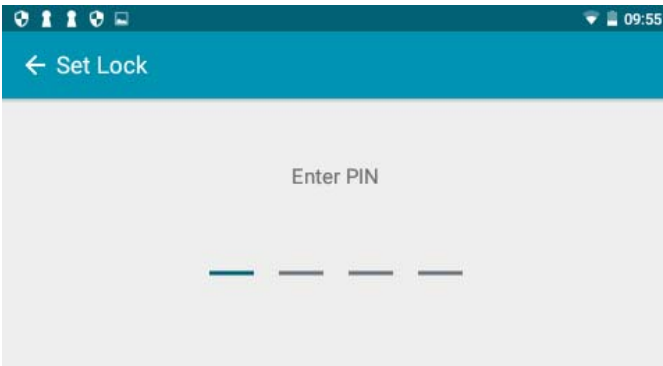
Tablet home screen



Click to open program menu

The program will open to a list of 8 dashboards. At the top of the page is an icon for the program menu. Click on it to be presented with the following options:

Enable Lock- Opens a window where a 4-character password can be entered and then will be required to open the APP. If used, the user will be prompted to enter it again to confirm. Once confirmed, the menu selection changes to “**Disable Lock**”, and requires that the password be entered in order to disable it.



If the password is lost or forgotten, to clear it, go to the application maintenance section of your device. Select “CLEAR DATA”.

Note: This will erase all settings and all IPs for E-MICRO's being monitored.

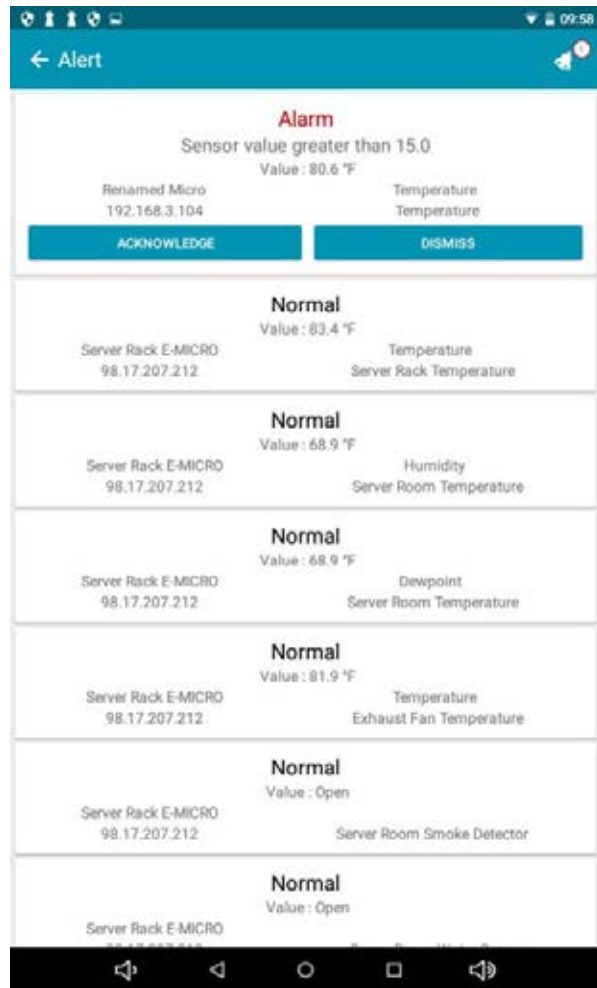
Check Updates- checks for availability of a new software version

Alerts- Click to quickly see what alerts are being reported for the units being monitored by the APP

If there is an alert, the user has the option to **Acknowledge** or **Dismiss** the alert.

If the user acknowledges the alert, no additional alert messages will be sent during that alert status cycle.

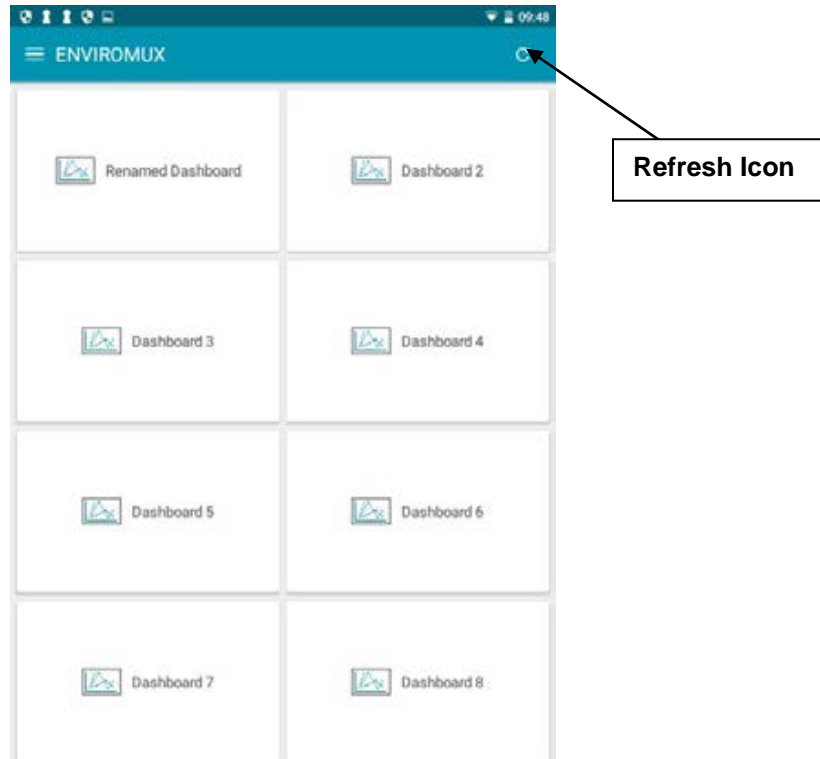
If the user dismisses the alert, another alert message will be sent once the “notify again after” time (designated on the configuration page of the ENVIROMUX sensor) elapses.



Refresh- Performs a quick refresh of all monitored E-MICRO's to make sure all reported data is current

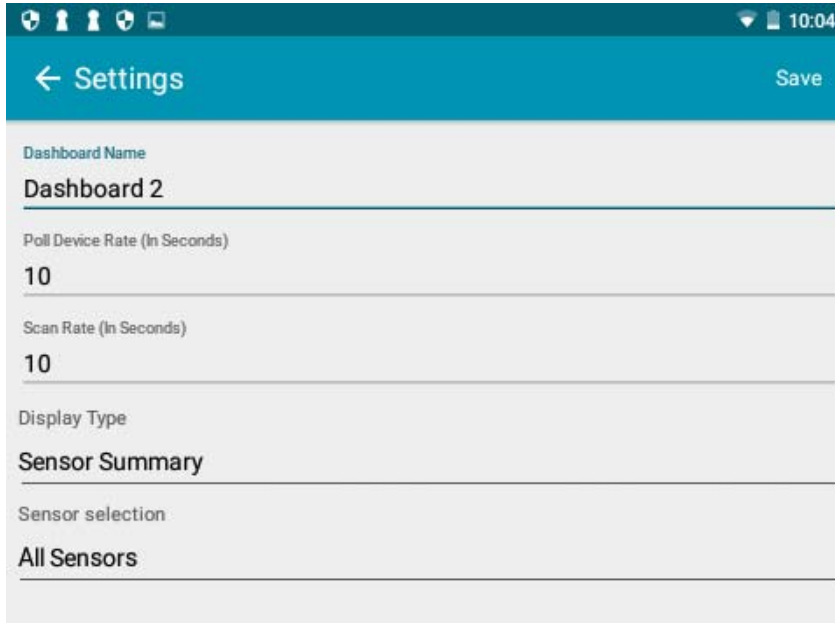
About- Display a screen with information about the APP and a link to the APP on the NTI website.

2. Select a dashboard to bring up the status screen.



3. Initially, since no E-MICRO's are configured, you will have the message "No Devices Enabled".
Select the Settings icon to bring up the configuration screen for the dashboard.



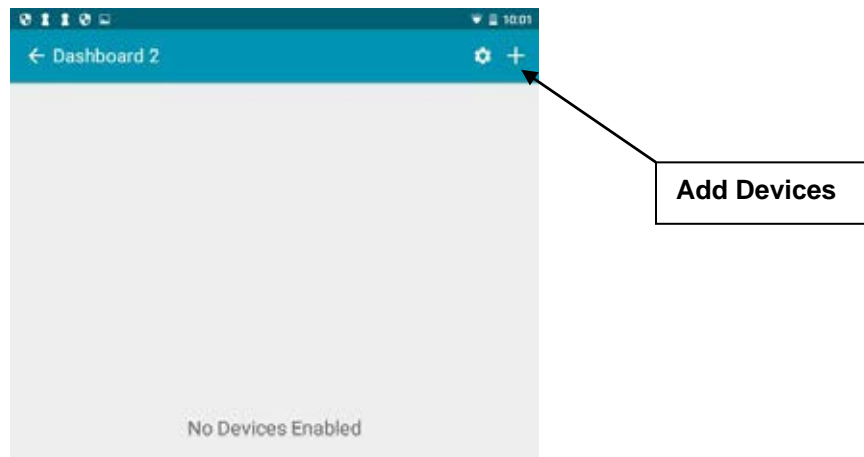


On the setting screen you can enter the following parameters:

Dashboard Name	Any preferred name to be displayed
Poll Device Rate	The time in seconds between each time the tablet will poll the E-MICRO units for a sensor reading update. Enter the desired value. Note: Allow at least 3 seconds per ENVIROMUX for the units that are being polled by that dashboard. Example. If 20 E-MICRO units are enabled for a dashboard, set the Poll Device Rate at a minimum of 60.
Scan Rate	The time in seconds that the tablet will dwell on each displayed sensor status before displaying the next sensor status. Enter the desired value. (Enter 0 to disable scanning)
Display Type	Sensor Summary -Display a summary of all sensors being monitored from all connected devices, or Individual Sensor - the data from individual sensors, one at a time
Sensor Selection	All Sensors - Display all connected sensors for a monitored ENVIROMUX, or Selected Sensor - just the sensors selected in the configuration for the monitored ENVIROMUX (see "Select/Edit Sensors")

When finished making changes, click on "Save".

4. To add E-MICRO's to be monitored, touch the "+" symbol.

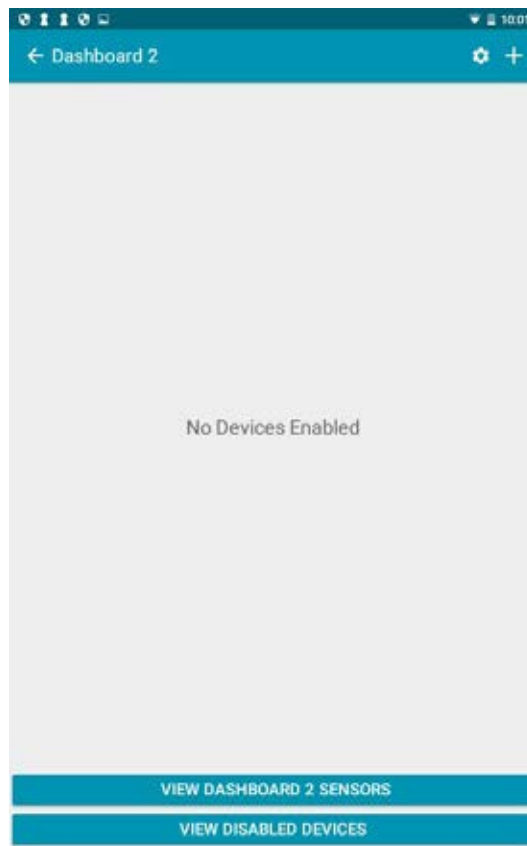


In the screen that appears, enter the I.P. address of an E-MICRO unit connected to the same subnet the tablet is connected to (unless your network is configured to work across subnets). Then enter the Username and Password to get access to the E-MICRO.

Note: *If you don't have a username and password for accessing the E-MICRO through your web browser, then you won't be able to access it through the APP either.*

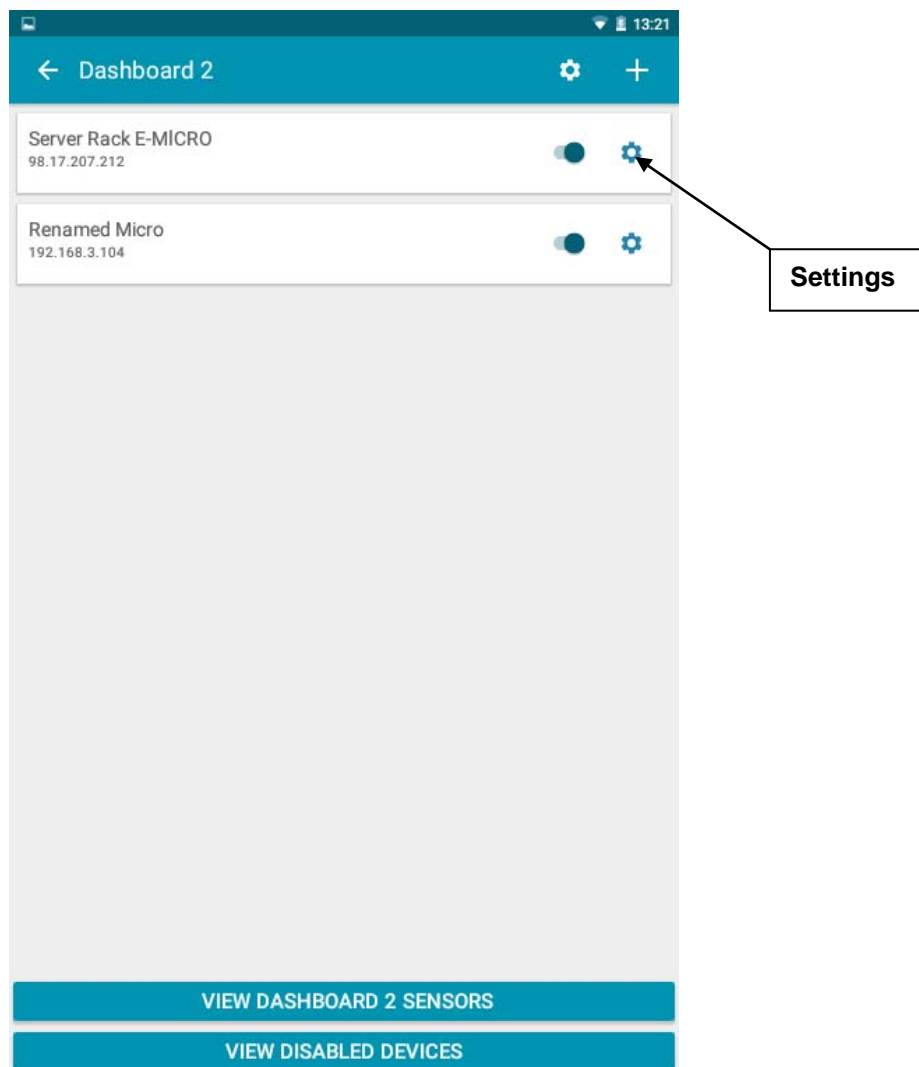
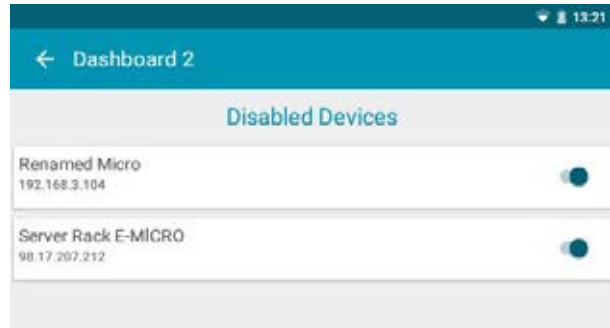
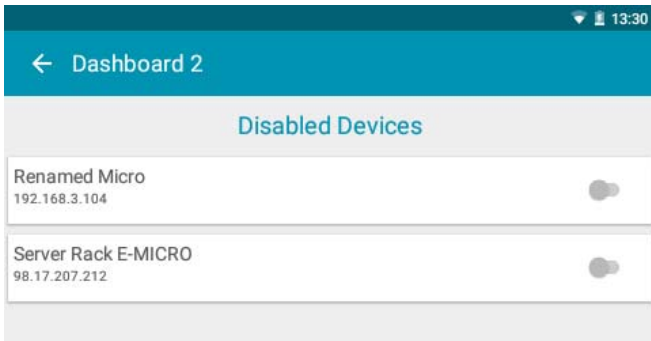


5. If you want to enable that dashboard to connect to and monitor the sensors for the selected ENVIROMUX, slide the “**Enable**” button to the right. The button will change from gray to teal blue.



If you have numerous ENVIROMUX's configured to be monitored, but only want to view specific units from a particular dashboard, then the units not enabled to be viewed will be listed if you click on “**VIEW DISABLED DEVICES**”.

In this screen (below), if you slide the switch to the right, and go back to the previous screen, that unit will now be listed for those E-MICRO's being monitored.



6. With the E-MICRO's listed to be monitored, select the Settings icon. Under settings you will be able to change the name as it is viewed in the APP. (See next page)

You can also change the network settings and the time settings of the ENVIROMUX.

7. At the bottom of this page you can click on Select/Edit Sensors to bring up a list of sensors connected to that ENVIROMUX.

← Server Rack E-MICRO Save

System

Unit
Server Rack E-MICRO

Unit Name
ENVIROMUX-MICRO-T(RHP)

Uptime
7 days, 12 hours, 0 mins

Firmware
3.1

Network

Enable DHCP

IP Address
98.17.207.212

Subnet Mask
255.255.255.224

Default Gateway
98.17.207.193

Preferred DNS
166.102.165.11

Alternate DNS
8.8.8.8

Time

Enable NTP

Enable DST

Time Zone
GMT-05:00) Eastern Time

Date Format
MM-dd-yyyy

Time Format
AM/PM

NTP Server
0.nti1.pool.ntp.org

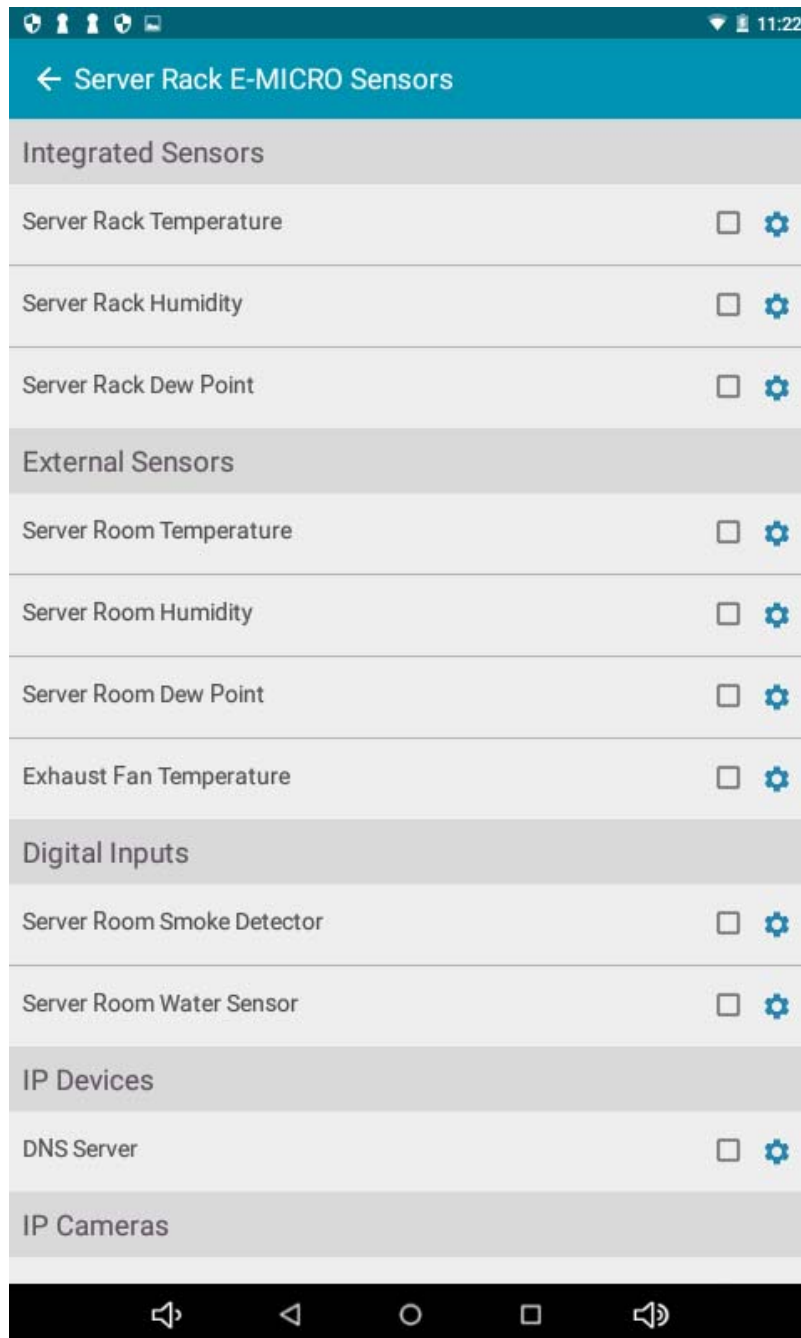
NTP Frequency
180

SELECT/EDIT SENSORS

Bring up sensors list



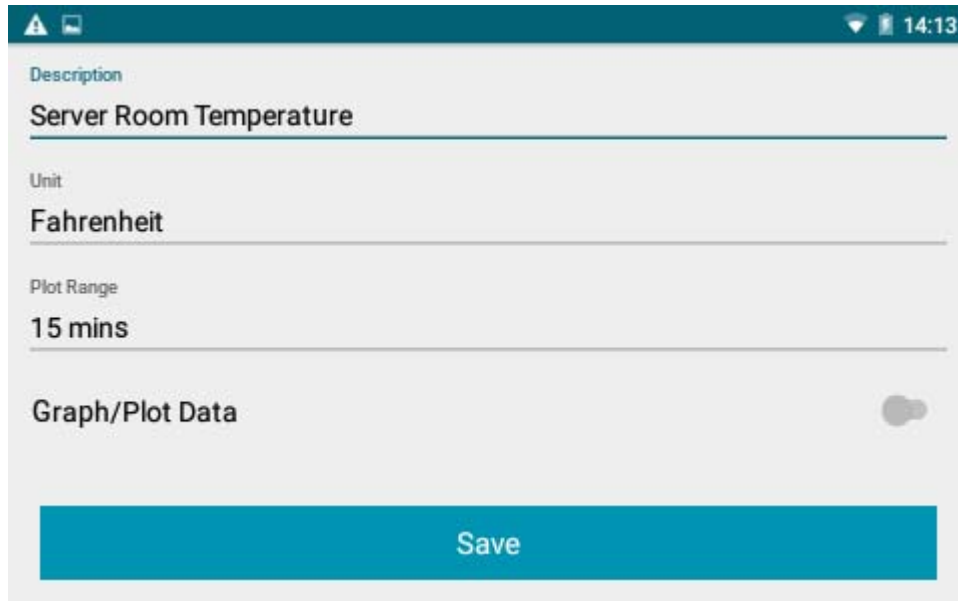
By placing a checkmark in the box for a sensor, you will be choosing which sensors will be displayed when the APP is set to display type "Selected Sensor".



Click on the settings icon to bring up a screen with configuration options you have.

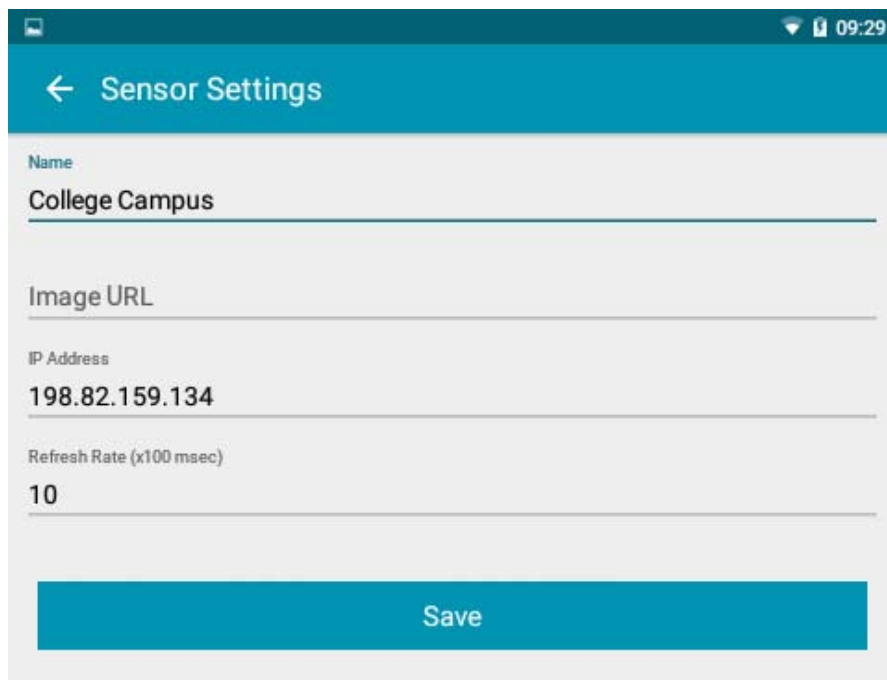
8. From the sensor settings page, you can:

- 1) rename the sensor (as viewed in the APP)
- 2) Change the units (Temperature sensors only) from Fahrenheit to Celsius
- 3) Change the frequency at which reading will be added to a graph provided with the sensor status reported (Temperature and Humidity sensors only)
- 4) Enable or disable the recording of graphing data. (Temperature and Humidity sensors only)



A screenshot of a mobile application's sensor settings page. The page has a teal header with a back arrow and a notification icon on the left, and a status bar on the right showing signal strength, Wi-Fi, and the time 14:13. Below the header, the settings are organized into sections: 'Description' with the value 'Server Room Temperature', 'Unit' with 'Fahrenheit', and 'Plot Range' with '15 mins'. A 'Graph/Plot Data' section features a toggle switch that is currently turned off. At the bottom of the page is a large teal button labeled 'Save'.

If IP devices are monitored by the connected E-MICRO, then you will have the option of changing the name, the IP address of the device, and the rate at which that device is being monitored.



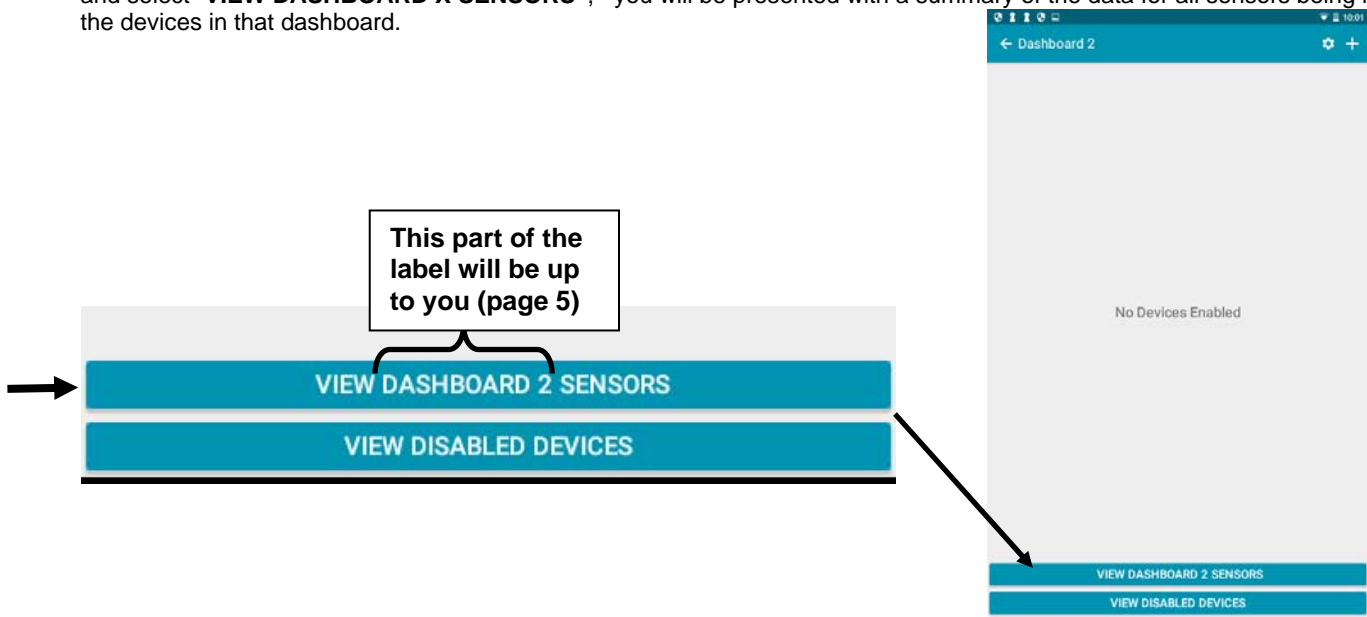
A screenshot of a mobile application's sensor settings page. The page has a teal header with a back arrow and the title 'Sensor Settings' on the left, and a status bar on the right showing signal strength, Wi-Fi, and the time 09:29. Below the header, the settings are organized into sections: 'Name' with 'College Campus', 'Image URL' (empty), 'IP Address' with '198.82.159.134', and 'Refresh Rate (x100 msec)' with '10'. At the bottom of the page is a large teal button labeled 'Save'.

Once settings have been changed, be sure to press **“Save”**.

Using the APP

With the APP configured in the fashion you wish to use it, a variety of viewing styles are available to you.

If you have **Sensor Selection** (page 5) is set to **All Sensors**, and display type **Sensor Summary**, then when you are at a dashboard and select "**VIEW DASHBOARD X SENSORS**", you will be presented with a summary of the data for all sensors being monitored by the devices in that dashboard.



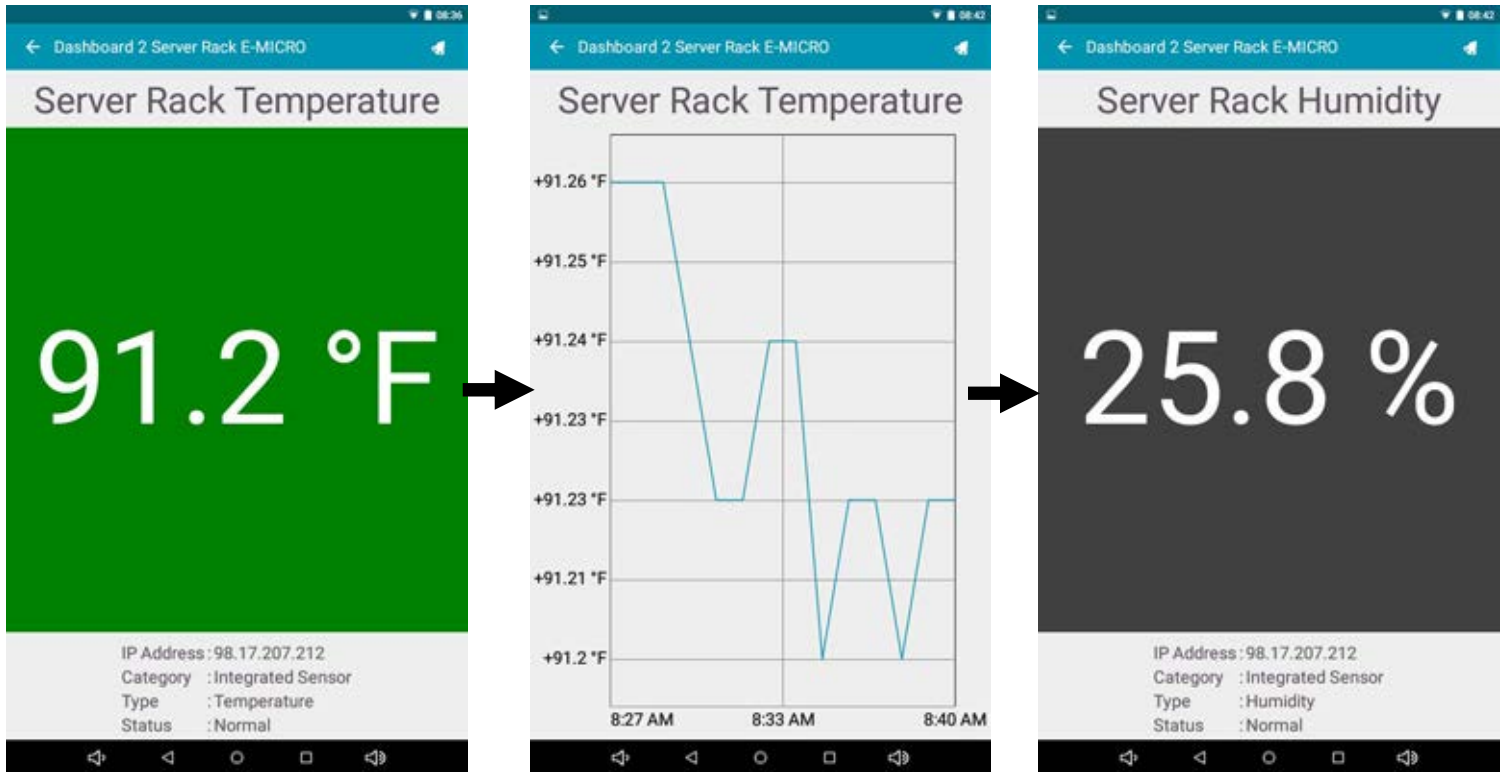
The summary will scroll, unless you touch it to stop the scrolling. Touch again to resume scrolling.

If **Sensor Selection** is set to **Selected Sensors**, then only the sensors you have checked (page 9) will be listed.



If you have selected display type **Selected Sensor**, then when you are at a dashboard and select **"VIEW DASHBOARD X SENSORS"**, you will be presented with data from individual sensors, with the option to swipe the screen to view the next piece of data or next sensor. If the scan rate (page 5) is set above 0, the screen will automatically advance by itself using the time period you have set.

If you have configured a sensor to provide graphs (for those that are applicable), then the second screen presented for a sensor will be graph data of readings taken over time.



If the sensor is just a contact sensor, then the status will be Open or Closed.



If IP cameras are configured to be monitored, you will be presented with the view from those cameras.

