Wireless Sensor for Remote Environmental Temperature & Humidity Monitoring

Nano Atom — Quick Start Guide

Caption DATA Limited

In The Box

Box Contents :- Nano Atom / 1mtr USB Charging Cable / Velcro Fixing Pad / Fully Roaming SIM card /Pre-installed

Specification

Dimension - 80mm*64mm*25mm

Battery - Built-in 3.7V/2000mAh Lithium

Built in GSM Antenna

Flash Memory— 2880 saved data points

Temperature Sensor precision - ±0.3

Sensor Detection Temperature Range -40 ~ +125 Deg C

Humidity measurement precision ±3%

Operating Temperature Range -20~+60

Specification

Power Consumption in Transmission mode (avg.) < 100mA

Power Consumption in Sleep mode(avg.) < 2mA

Operating Air pressure 860Kpa --1060Kpa

Operating Humidity Up to 75% non-condensing

GSM chip SIMCOM GSM chip, 4 Frequency GSM 850/900/1800/1900mHz

LED indicators for Temperature Measurement / Data upload / Battery Charging

Step 1

Unpack & Charge

Unpack your Nano ATOM and plug it in to charge using the USB cable provided.

As soon as the unit is suitably charged it will start sending data to the SmartHub server every hour. Once the unit is fully charged the Red LED light will switch off. Charging takes approx. 4 hours. Note: Whilst charging the heat generated will distort the readings.

Step 2

Locate your Nano ATOM

Place the unit in the area you want to measure. Stand the Nano ATOM on a flat surface or use the sticky Velcro pad that to attach it to a suitable fixing point. Make sure you leave the sensor hole in the side of the unit free to measure the surrounding environment. **Note**: Keep the sensor away from liquid and excessively dusty environments.

Step 3

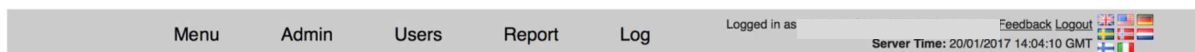### Log in and see your data on the SmartHub

To see your data type in:

nanoultra.captiondata.com to your browser and log in using the user name, password and customer code you have been provided.

Once you have logged in for the first time it is advisable to reset your password using the Reset Password option from the main menu.

Step 4

Using the SmartHub

To Personalise your locations:

Menu	Admin	Users	Report	Log	Logged in as	Feedback Logout

Server Time: 20/01/2017 14:04:10 GMT

Main Menu → System Administration

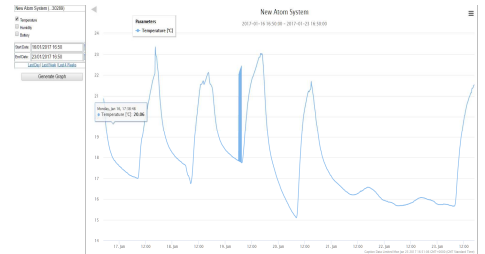| Status	ID	Name	Project Filter: All	Last seen	Sample/Report periods	Sig Quality	Software version		
	...81160	Battersea Power Station	Demo Site	2017-01-20 14:00:27 Map	10 Minutes		1.9.0.0/1027	Report	Deactivate

The Nano ATOM units will be listed under the ADMIN menu. Click on the "**Name**" of the unit and change its name to a description that will be useful to you. To save your changes press the "**Submit Changes**" button at the bottom of the screen.

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Step 5

To generate graphs of your data:

Battersea Power Station (...81160)

- ☑ Temperature
- ☑ Humidity
- ☐ Battery

Start Date: 13/01/2017 13:57
End Date: 20/01/2017 13:57

Last Day | Last Week | Last 4 Weeks

Generate Graph

- Click on the "Report" button (menu or other links)
- Select the items you want to see on the graph
- Select the time period you want to review
- Press "Generate Graph".

You can select other Nano ATOM units from the dropdown list

Step 6

To print or share your graphs and data:

Print chart

Download PNG image
Download PDF document
Download SVG vector image
Download CSV
Download XLS

To share the data from the graphs go to the menu icon at the top right of the reporting screen and select the output you would like. You can print graphs or download the raw data.

Example Temperature Graph:

Step 7

To receive Alarms if conditions go outside your limits:

- Set your alarm values in Low & High boxes
- Set Battery Alarm Low to 3.8V (20% power)
- Select Alarm Recipients
- Press Submit Changes to save
- When you receive an alarm. You must log in and press the "**Reset**" button to receive future alarms
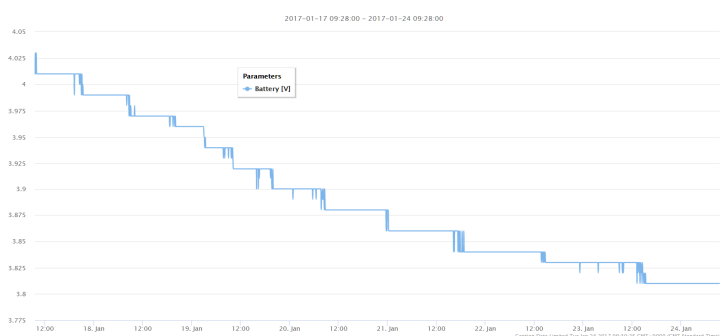
Alarm Recipients	Hide		
	Name	Email	SMS
Test User		☑	☐

Last Measured Values @ 2017-01-20

Name	Value	Alarm Low	Alarm High
Temperature	29.86 °C	20.15	25
Humidity	28 %	40	60
Battery	4.21V	3.7	

Submit Changes

Alarms are FREE if sent by email but chargeable by SMS

Example Battery Voltage Graph:

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FAQ's

- **My system is not showing a recent "Last Seen" Date on the System Admin screen?**

    1) Check that the unit is charged

    2) It is possible that the unit is in a location without GSM coverage. Move the unit to another location.

- **I don't have any GSM coverage where I am trying to measure?**

    In this case you will not be able to receive real time messages from the cloud.

    The sensor will still log data, & next time it is placed in an area with GSM coverage it will up load the data that was not sent previously.

- **My Last seen Date/Time is shown in red?**

    This means that your Nano ATOM has not connected with the server for more than 1 hour. This can be due to the battery having stopped or no GSM signal.

- **Can I keep my Nano ATOM attached to a power outlet?**

    Whilst your unit is attached to a charging point the readings that it takes will be slightly affected by the heat generated by the charging and will not be as accurate.

- **What is the QR code on the unit?**

    The QR code allows you to scan the unit and be taken directly to the unit on the SmartHub site. You will be asked to log in if you are not logged in already. This feature can be useful when you are setting the room names for each sensor as you will be directed directly to the appropriate sensor.

- **Can I control who sees the data?**

    All data is password protected, and if you have administrator access you can grant access to anyone you need. You can organise your sensors into logical groupings to reflect management responsibility and still see all the sensors yourself. This allows you to be able to see any sensors below you in the hierarchy and restrict access as you require.

- **Can I move units between locations?**

    You can move units between different departments or sites that you set up. Please note that all the historical data from the unit will remain attached to the Nano ATOM unit, so if you need to retain records it is advisable to download or print the necessary data before moving the sensor on the system.

- **How do I turn off battery for long term storage?**

    You can remove the 4 screws and open the unit. You will see the on/off switch adjacent to the power connector and this should be moved to the right ie away from the charging point..