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ROBYDOME LTD

WTM-2: MANUAL

WTM-2 INSTRUCTION MANUAL

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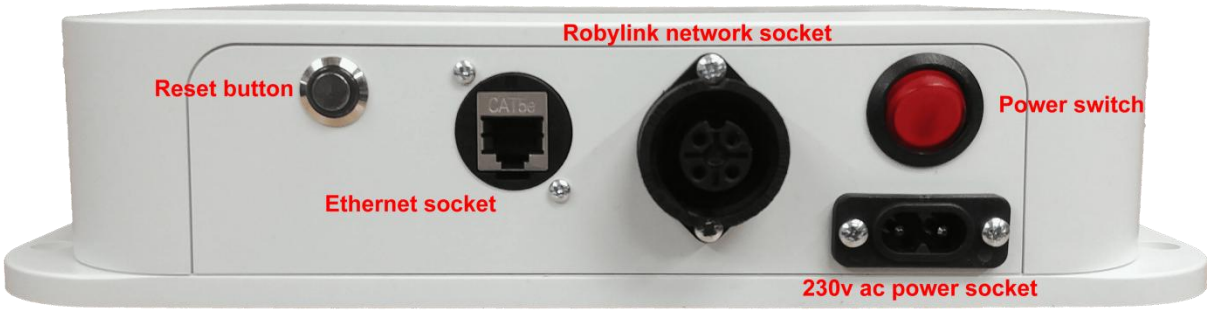
1. INSTALLING THE WTM-2

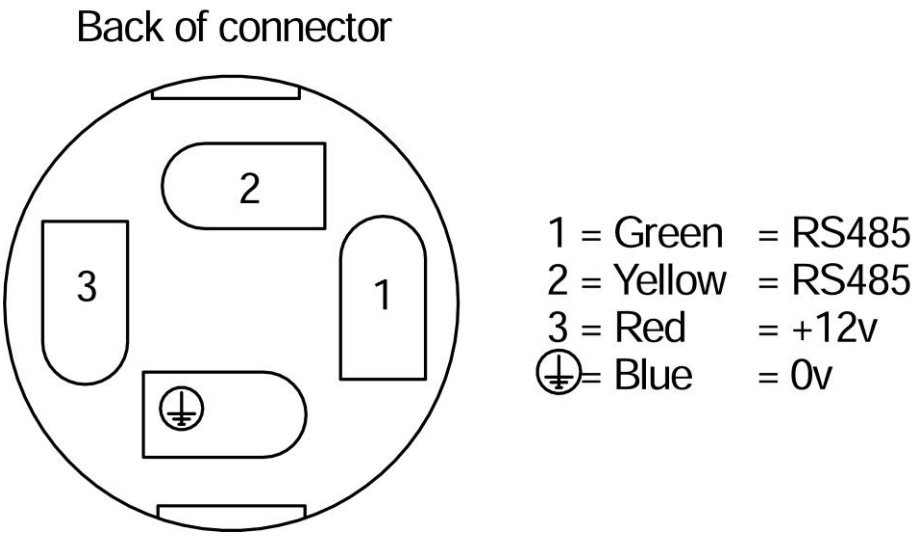
The WTM-2 requires a 230v mains power connection and an Ethernet network connection.

Img.1



The Robylink network connector will need to be wired as per img.2 The other end of the 4 core Robylink network cable should be connected into the Wireless receiver as per the wiring instructions provided with the receiver, this must be done prior to connecting to the WTM-2.

Img.2



Once all connections are made, turn on the WTM-2 via the power switch.

2. SETTING UP YOUR ACCOUNT.

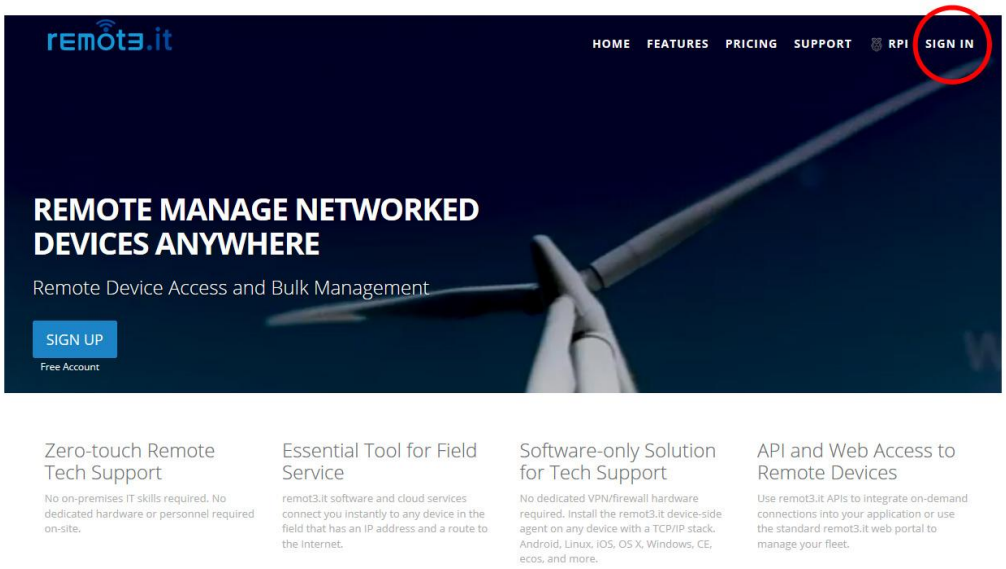
In most cases your account will be setup by a Robydome engineer prior to delivery but if that is not the case the instructions below will help guide you through the process.

To begin using the online access features of your WTM-2 you will first need to register a free account on https://www.remot3.it , you will then need to provide the details of this account to Robydome ltd to register your WTM-2 with your account and provide you with access to the Robydome portal.

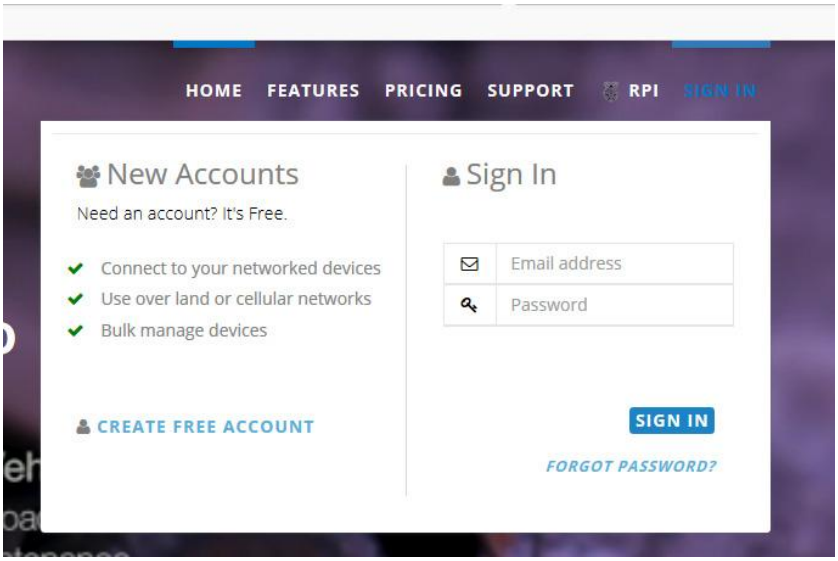
2.1 SETTING UP AN ACCOUNT.

Select sign in (shown highlighted in img.3), then select Create Free Account (shown in Img.4), follow the on screen prompts making a note of the email and password that you used.

Img.3



Img.4



Once your account has been created contact Robydome either by phone on 01787 310163 or by email at steve@robydome.co.uk , you will need to provide the email address and password that you used for your account on Remot3.it, this is important as it allows us to register your WTM-2 with this account and provide you portal access.

You will be contacted shortly after you have provided these details with confirmation that your WTM-2 is connected to your account and a link and login details for the Robydome portal.

3. LOGGING INTO YOUR WTM-2

Now that you have your account setup you are ready to login to your WTM-2, there are two ways to do this, one where you are logged into the same local network as the WTM-2 and one where you are connecting to it over the internet.

3.1 CONNECTING OVER A LOCAL NETWORK.

Your WTM-2 will have a device name that will be provided in the back of this manual, to connect to your WTM-2 over a local network simply enter this name in the address bar at the top of your web browser. You may need to add HTTP:// before the name depending on your web browser.

3.2 CONNECTING OVER THE INTERNET.

The most common mode of connecting to the WTM-2 will be over the internet, to do so go to www.robydome.co.uk/portal and enter your login details, you will now be taken to a list of your WTM-2's, select the WTM-2 that you wish to access and you will be taken to that devices home screen.

4. THE HOME SCREEN

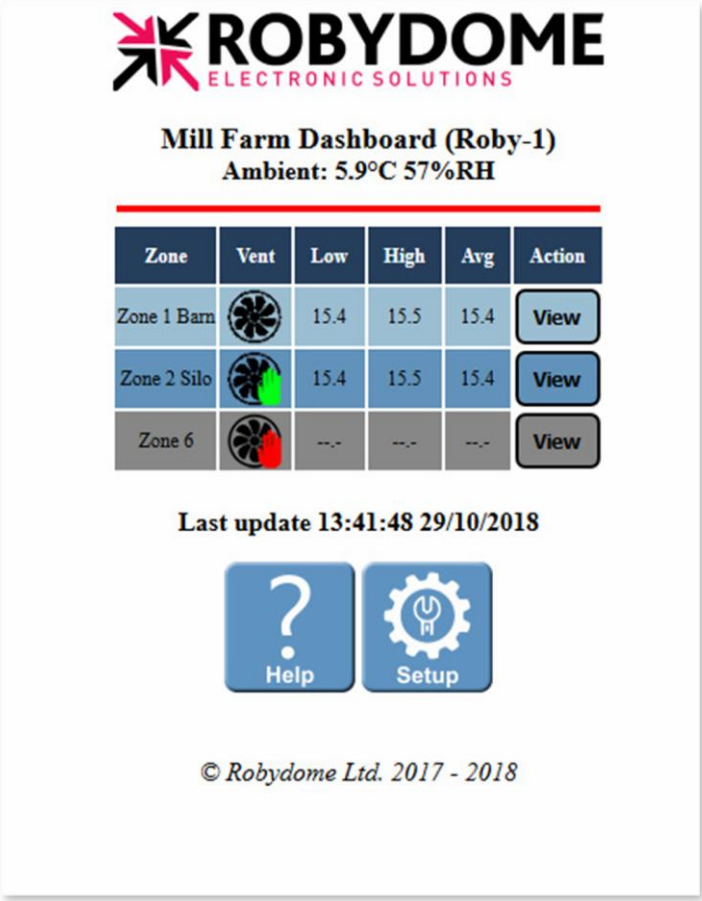
The first page will be the home screen of the WTM-2, this screen gives you an overview of the zones, each zone corresponds to a different wireless receiver, in most cases there will be a receiver per store but if you have a particularly large store you may have more.

Img.5 below shows an example store with 3 zones, from left to right the overview gives you, the zone name, the state of ventilation in the zone, the lowest temperature reading in the zone, the highest temperature reading in the zone, the average temperature of the zone and the view button.

Pressing the View button will take you to the temperature reading screen for that zone, information on that screen can be found in the next chapter.

At the bottom of the screen you there is also the help and setup buttons, pressing the help button will display helpful text on the operation of the current screen, pressing the setup button will take you to the setup screen.

Img.5



5. THE TEMPERATURE READINGS SCREEN

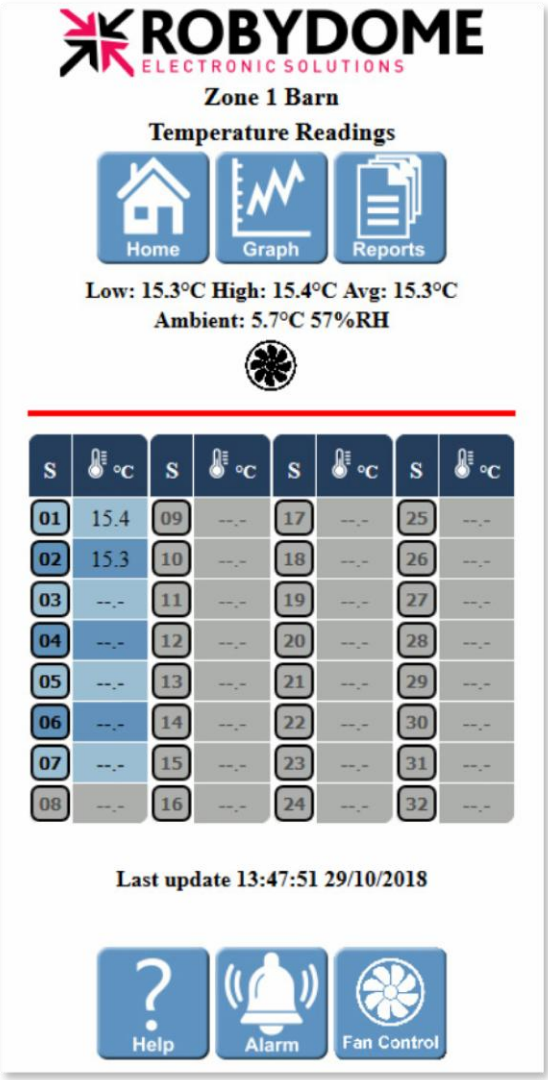
Pressing the view button will take you to the temperature readings screen for that zone. Img.6 below shows an example screen, the navigation buttons along the top are, Home (takes you back to the home screen, Graph (takes you to the graph screen) and Reports (takes you to the reports screen).

Below the navigation buttons we have the same Low, High and Average temperature seen on the overview page as well as the current state of ventilation in the zone, followed by a grid showing 32 temperature probe readings, the number on the left is the probe number with the corresponding temperature reading to the right.

Clicking on the probe number will pop up a prompt of whether you want to disable the sensor, this will remove it from the average and it will not show up as the High or Low reading, a disabled sensor will appear grayed out on the list, you can re-enable a sensor be clicking on the sensor number.

A temperature reading of –.- indicates no reading from that probe, either because it is absent or needs new batteries.

Img.6



The three buttons on the bottom are.
Help. Which brings up helpful tips on using this screen.
Alarm. Which brings up the alarm screen for this zone. As seen on page 13.
Fan Control. Which brings up the fan control settings screen for this zone. As seen on page 12.

6. THE GRAPH SCREEN

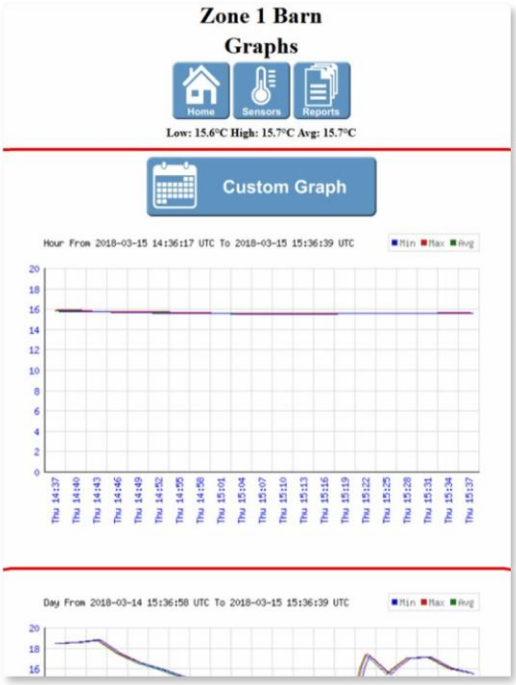
The graph screen has the same navigation buttons as seen on the previous screen with the exception that the graph button has been replaced with the temperature button that takes you to the current zones temperature readings screen.

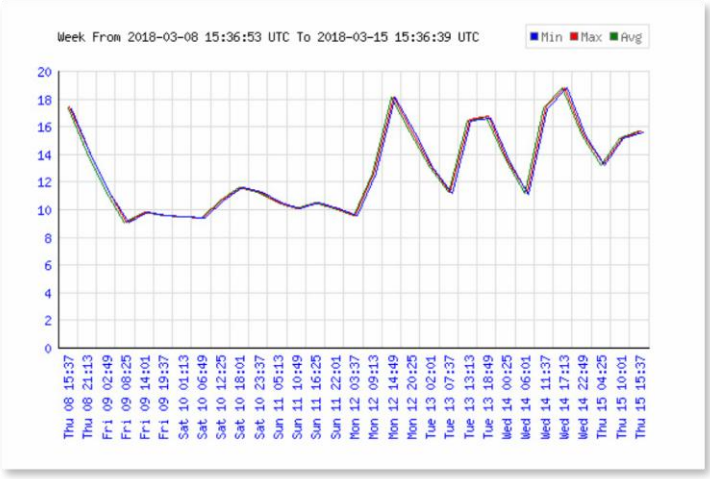
The graph screen produces graphs showing the High, Low and Average temperature for the current zone over The Last 24 hours, The Last Week and The Last Month. The Graphs are images and can be copied and saved just like any image.

There is also a button that lets you select a custom date range to generate a graph for.

Img.7 below shows an example Graph screen and Img.8 shows a graph copied from a running WTM-2.

Img.7





Img.8

7. THE REPORTS SCREEN

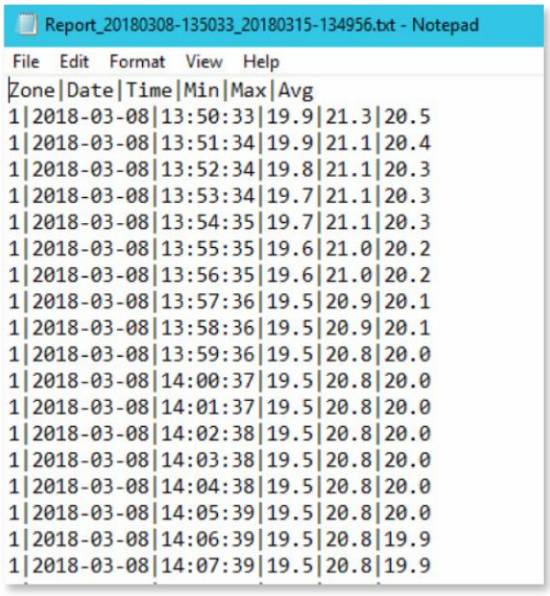
The top of the reports screen is much like the graph screen in that the navigation buttons are the same as the other screens except that the reports button has been replaced by the temperature screen button.

In the center of the reports screen there are four buttons, 24hour report, Week report, Month report and Custom report. When these buttons are pressed they will generate a text file containing the High, Low and Average temperatures recorded in that time period, the Custom report button allows you to set the date range for a report.

In addition to these buttons there is also a tick box to include all sensors in the report. If this is ticked then instead of the high, low and average the report will list every temperature reading over the selected time period.

An example of the generated csv can be seen in img.9 below.

Img.9

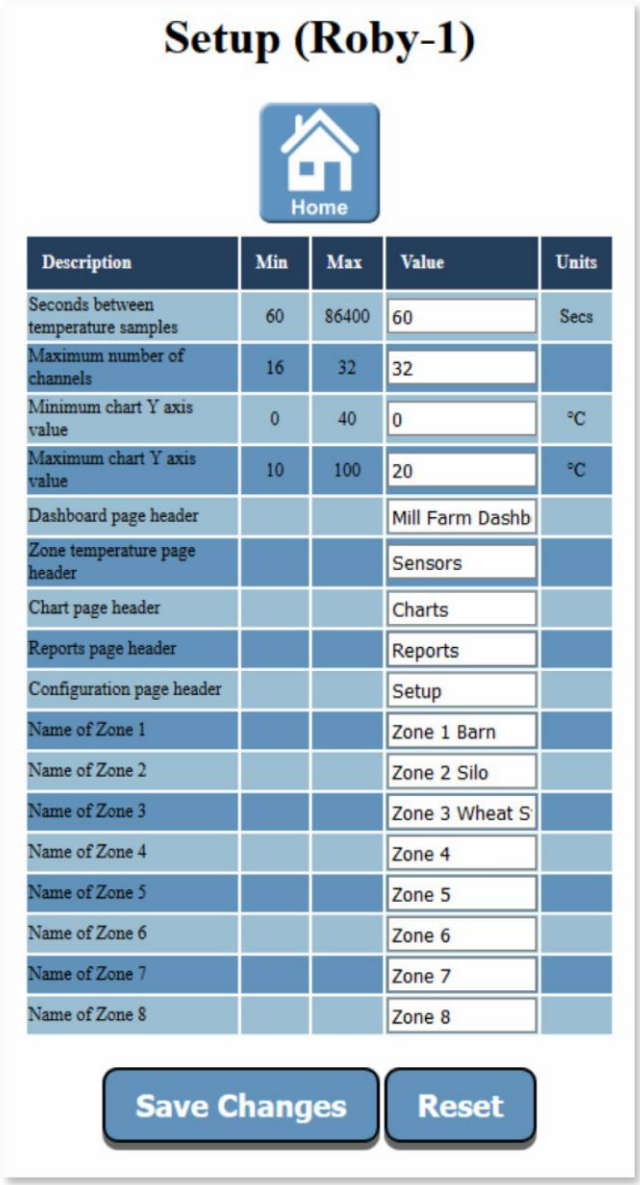


8. THE SETUP SCREEN

The setup button will take you to the setup page, an example is shown in img.10 below. Most of these settings we recommend you leave at the default value, the settings you will most need to change are the zone names, we recommend you change these to something that makes sense to you and helps you remember where each zone is, for example “Shed B”, “The Old Hanger”, “Store 1 front” & “Store 1 back”

Seconds Between temperature samples, is literally that, the time between the system reading the temperature sensors, it is recommended that this is left at the default value. Unless your crop is very susceptible to fast temperature changes you will not benefit from reading the sensors more often than once every ten minutes.

Maximum number of channels refers to the max number of temperature sensors in a zone, this can be set from 16 to 32 sensors.



9. FAN CONTROL

On the Sensor Screen there is a button marked Fan Control, this brings you to the Fan control settings screen for that Zone.

The settings are.

9.1 FAN CONTROL REFERANCE

Here you can set the Fan control reference, this is the crop temperature that the fan control will reference and can be set to Average, Highest or a Nominated Probe.

9.2 FAN CONTROL ENABLED?

Here you can set whether the Fan control is enabled or not.

9.3 TARGET TEMPERATURE

Target Temperature, this is the temperature you are trying to get your crop down to, once your reference temperature reaches this value the system will stop trying to ventilate it.

9.4 AMBIENT DIFFERENTIAL

You now have Ambient Differential, this is the amount less than the reference temperature that the outside air must be before the fans will run. It would be a waste of electricity to run the fans if the outside air was no cooler than the crop.

9.5 FAN OVERRIDE

This lets you force the fan to run.

9.6 RH LOW SET POINT

Set the lowest allowed ambient RH. When the ambient humidity falls below this value the fans will not run.

9.7 RH HIGH SET POINT

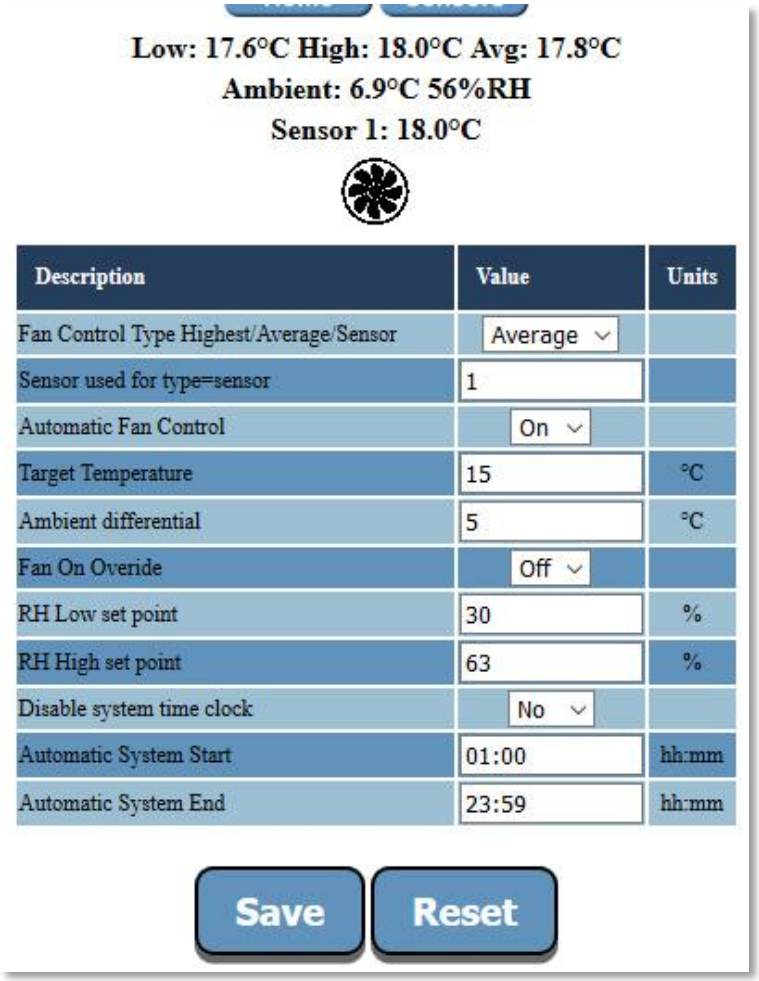
Set the highest allowed ambient RH. When the ambient humidity raises above this value the fans will not run.

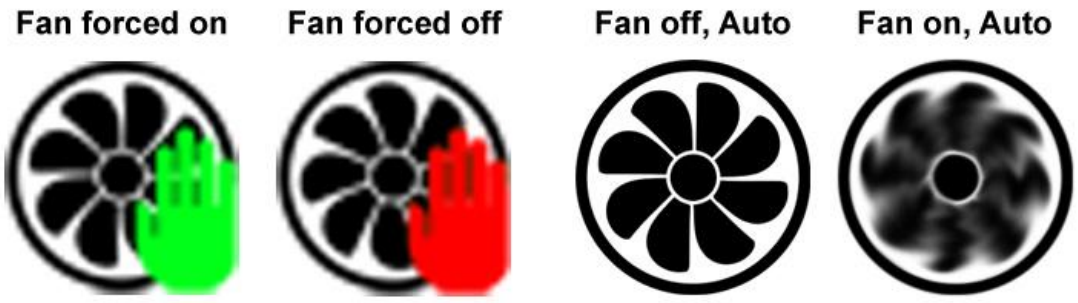
9.8 SYSTEM TIME CLOCK

The WTM can be set to only operate the ventilation fans between these times, or this function can be disabled to allow automatic control 24 hours a day.
The start time is when automatic control will function and the end time is when it will cease to function until it gets back around to the start time again.

When you have changed any of these settings press Save to commit the changes you have made.

When the fans are running there will be a small fan symbol spinning at the top of the screen.





10. ALARMS

The WTM can be set to send you emails in the event that the crop temperature falls outside of the values set in the Alarm setting screen for each zone.

10.1 EMAIL SETTINGS

The first thing that needs to be done before alarms can be used is to set the email settings for the unit. We do this from the settings screen accessible from the main screen.
There you will need to set the SMTP host address that you are using for the outgoing email, e.g. smtp.google.com
Then the port number for that host. The default is 465.
You then need to put in the user name and password associated with that host, this will usually be your email address and password.
Now you set the email addresses you want the Alarm email sent to and the address you would like it to say it is from.

10.2 ALARM SETTINGS

Each zone has its own alarm settings screen where you can set whether you want alarms enabled on that zone, Whether the Alarm is based on the Average temperature in the zone or the Highest temperature and what temperature you would like it to alarm at when it is above.

When a zone alarms it will send you an email with the alarm condition information. It will also turn that zone red on the main screen and any sensors that are above the alarm value red on the sensors screen. This should alert you a potential problem in the store.

11.USER INFORMATION

Name	
Device ID	
User Name	
Password	

12. ROBYDOME CONTACT DETAILS

Robydome ltd
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Sudbury
Suffolk
CO10 1WH

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Fax: 01787 880631

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Sales gary@robydome.co.uk