

Contents

Diligence WiFi»

RF300 Instruction Manual

Page No.	Section No.	Title
2	Section 1.0	System Set-Up
3	Section 1.1	PC Vs Cloud Data Storage
4	Section 2.0	Data Logger and Network Set-Up
7	Section 2.1	Advanced Network Configuration
8	Section 2.2	General Settings For PC Set-Up
12	Section 2.3	PC Storage Set-Up Completion
13	Section 3.0	Viewing Devices On The PC
14	Section 3.1	Data Logger Status and Properties
15	Section 3.2	Data Logger Sessions
17	Section 3.3	Graphing Data
28	Section 3.4	Saving & Exporting Data
21	Section 4.0	Data Logger Management
23	Section 4.1	Adjusting Data Logger Settings
26	Section 4.2	Muting & Resetting Alarms
27	Section 4.3	Deleting A Data Logger
28	Section 5.0	Viewing Previously Saved Data
26	Section 6.0	Signing into a Cloud Account
28	Section 6.1	Data Logger and Cloud Set-Up
31	Section 6.2	General Settings for Cloud Set-Up
32	Section 6.3	Viewing Data Loggers on Cloud
33	Section 6.4	Add New Data Logger on Cloud
37	Section 6.5	Viewing Cloud Data and Graphs
40	Section 6.6	Event Logs
42	Section 6.7	Resetting Alarms
43	Section 7.0	LCD lcons
44	Section 7.1	Data Logger Screens
45	Section 7.2	Battery Life & Charging
46	Section 7.3	Reset & Factory Restore
47	Section 7.4	Firmware Updates
51	Section 8.0	Enterprise Network
52	Appendix 1	RF300 Email to SMS/Text Service (US only)

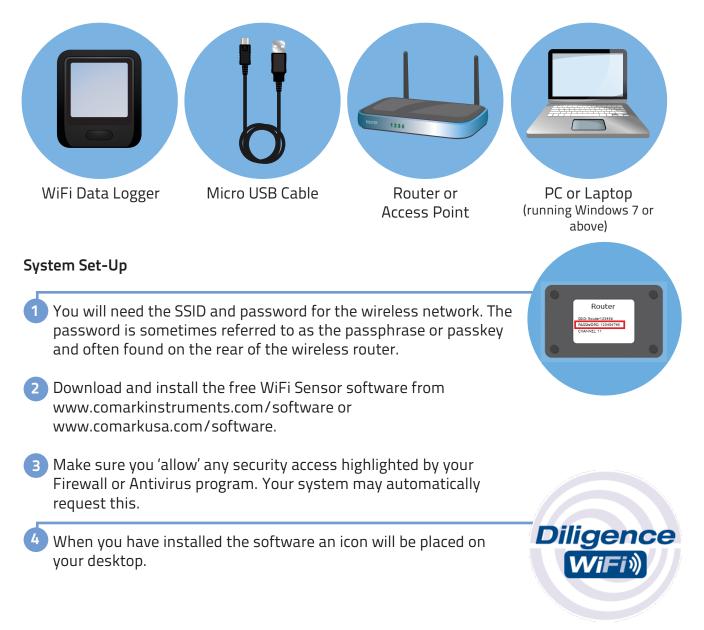
Part No. 20308-2

RF300 Software Instructions

Section 1.0

System Set-Up

Ensure that you have the following:

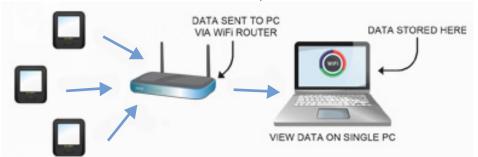


Data Storage Choices

There are two data storage choices for your WiFi monitoring system; on the PC or on the Cloud.

PC Data Storage

With PC data storage all your data is stored locally on your PC. All data is kept within your local network and no internet connection is required.



To store data from your data loggers on your PC please click 'On This PC' during the set-up process. Please turn to Section 2.0 for detailed instructions for setting up your data loggers for PC storage.

Hint / Tip:

The PC and the logger MUST be on the same part of the network.

The software must be running for the data logger to send data to it. Should the software be closed accidentally or it shuts down (this will happen when the PC goes into sleep mode) the loggers will go into hibernation mode and retain their data until the software is opened again. The loggers will indicate they have lost connection by the antenna flashing. It may take a full transmit period to reconnect the logger to the PC software and then a number of hours to fully download the recorded data. This will depend on how long the device has been disconnected. It is important to know that while disconnected alarms will not be received by the software and the USER will be unaware of them.



Cloud Data Storage

With Cloud data storage all your data is stored remotely on our secure servers . Data is transferred to our servers through the internet and is then accessible from anywhere via a web browser on any internet enabled data logger.



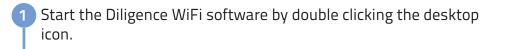
To store data from your data logger(s) on the Cloud please click 'On The Cloud' during the set-up process. Please turn to Section 6 for detailed instructions for setting up your data logger(s) on the Cloud.



RF300 Instruction Manual

Section 2.0 Data Logger and Network Set-Up

This section is for PC users.

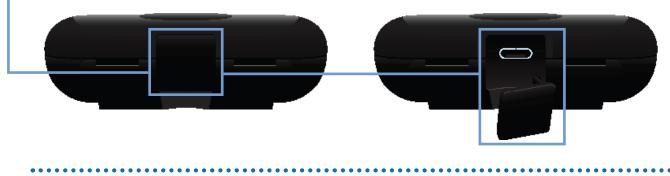




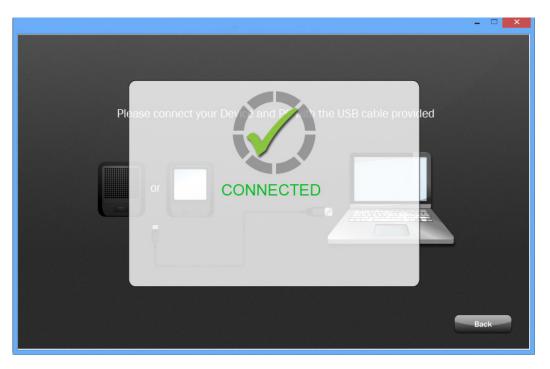
Click 'Set-Up Device' button and choose 'On This PC'.



3 Connect the data logger to your PC using the USB cable provided. The USB socket on the data logger is protected by a rubber bung, remove this to gain access to the socket.



Note: If the data logger connects successfully you will see the following screen. If it fails, check the cable is fully connected to the data logger and PC. The software will automatically try again.



4 Scanning

When the message 'scanning' appears the data logger is listening for wireless networks that are currently in range. Once scanning has completed a list of available networks will be displayed. If the list is blank press the 'refresh connections' button on the top right.

	- 🗆 🗙
Select a wireless network for the device to connect to: DanaherTM Secured wireless network (WPA2) AuthorizedGuest Unsecured wireless network Unsecured wireless network TP-LINK_80415D Secured wireless network (WPA2) BTWiFi Unsecured wireless network	Refresh connections
Sensor Mac Address: 98.8B.AD.00.0C.A9 Sensor Type: RF313-TH Sensor Firmware Version: 2.68 Cancel Back	Next

5 Select the network you wish to connect to.

- 6 If you use a hidden network simply scroll to the bottom of the list and select 'Join Other Network' and then fill in your network details.
- 7 Enter the password. Press 'Connect'. After the router has successfully connected press 'Next'.

Note: If the data logger fails to connect to your wireless router the following screen will appear. Follow the on screen instructions and check the four points below.

	- 🗆 🗙
Select a wireless network for the device to connect to:	2
Demaher TM Secured wireless network (MP2 Ursecured wireless network Demaher TM Demaher TM Secured wireless network Demaher TM Demaher TM Secured wireless network Demaher TM Demaher TM Secured wireless network Demaher TM Demaher TM Secured wireless network Demaher TM Demaher TM Demaher TM Secured wireless network Demaher TM Demaher TM Demah	Refresh connections
PerWFi To help your sensor connect to the selected network: Insecured wireless network: 1) Check your password 2) Click on the software refresh button Password: 1234567 2) Click on the software refresh button C) To eviculate the position of your sensor	
(4) Ensure your WiFi router is turned on and within range of the sensor CANCEL CONNECT	
Sensor Lac Address: 98.8B AD 00.0C A9 Sensor Type: RF313-TH Sensor Firmware Version: 2 Cancel B	2.68 lack Next

- 1) Check your password
- 2) Click on the software refresh button
- 3) Re-orientate the position of your data logger
- 4) Ensure your WiFi router is turned on and within range of the data logger

Go to Section 2.3 for Cloud set-up and 2.2 for PC set-up.

RF300 Instruction Manual

If you need to configure additional network settings such as a static IP address, tick the Enter Advanced Network Options box before clicking 'Next'.

	- 🗆 🗙
Select a wireless network for the device to connect to:	Refresh connections
Sensor Mac Address: 98.8B.AD.00.0C.A9 Sensor Type: RF313-TH Sensor Firmware Version: 2.68	Next

Enter the IP address to configure the Data logger along with the Subnet Mask and Default Gateway.

It is also possible to lock the data logger so that it will only connect to one Wireless Access Point. This may be necessary if you have multiple Access Points with the same SSID. Enter the MAC Address of the Access Point.

					- 🗆 🗙
Advanced Network Ophons					
These settings are for Advanced users only. Change these options only if you understand the conse	quences.				
Automatic Device IP Address (DHC)	2)				
Fixed Device IP Address					
Fixed Device IP Address	192	168	123	321	
Subnet Mask	255	255	0	0	
Default Gateway	192	168	0		
Lock this Device to an Access Point					
Lock Device to Access Point Mac Address	00 .	1A . 2B	. <mark>3C</mark> .	4D . 5E	
			Car	ncel Back	Next

General Settings

Enter a name for the data logger, the temperature scale, sample rate and transmission rate.

			×
Abc VIE Se	ne Device to give it a unique identity neor (mex 12 char.)	Solect temperature scale	
(- @)	act sample rate E. This will set how often the device takes readings	<u>1 Minute</u>	
	act how often the device will communicate with the PC imunication reduces battery life	C, each <u>5 Minutes</u>	
Ballerv Life		Cancel Back Next	

Sample rate

This sets how often the data logger takes a reading. Note: This is not how quickly the data logger transmits the data.

Frequency of sample transmission

This sets how often the data logger transmits the information back to the PC.

In the example above the data logger takes a reading every 1 minute and logs this information on-board the data logger. Every five minutes the data logger will transmit the readings to the PC.

NOTE: the battery icon gives an indication of the battery life based on the settings you have selected. a fuller battery indicated a longer run time before charging is required. You can play with the settings to get your ideal setting.

Section 2.2.1

Alarm Set-Up

2 Temperature Alarm set-up.

	X
TEMPERATURE ALARIVIS Low diam	00 00 00 000000
The alarm icon will appear on the device when the alarm is triggered NOTE if the hold option is selected the alarm icon will remain on the device screen until alarm history is cleared manually or via software	Un Un Alarm hold 🔵 💿
Filter Out Unwanted Alarms For example, briefly opening the door of a chiller should not couse an alarm, but leaving the door open will!	Delay alarm bigger by No Delay
Audil Check An Audit Check is acknowledged by pressing the button on the device for 3 seconds (until the LOD blinks). This event is recorded and displayed on the graph	Exable Ucable Audit Check
	Cancel Back Next

Low / High Alarms

You can set an alarm to be triggered once a data logger exceeds a high or low temperature.

Note: If you try to set the low alarm higher than the high alarm (and vice versa) you will get an error message.

Alarm Delay

Use this to filter out unwanted alarms by delaying the alarm trigger. Select the desired delay from the dropdown box.

Alarm Hold

This will hold the data logger in its alarm state even when the temperature has returned to an acceptable range.

For example if the 'High Alarm' is set to 42°C and the temperature measured rises to 46°C it will trigger an alarm. If the reading then drops down to 41°C and 'Alarm Hold' is switched on, the data logger will remain in an alarmed state. If 'Alarm Hold' is switched off then the data logger would revert back to its normal state. In this situation you can check missed alarms by reviewing the graph.

Audit Check

This function will allow a user to record on the graph when a data logger is physically checked. This is acknowledged by pressing and holding the data logger button for three seconds.

RF300 Instruction Manual

Section 2.2.1

Alarm Set-Up

3 Humidity Alarm set-up.

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Low deam C	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
The dam can will appear in the texase when the asim is biggered	
ROTE. If the hald option is satisfied the above loss will remain an the device sources will also bid up to dimensional extensibly at via software	Aladia honti ÖÖÖ
Filler that Developed Abarres. For example, lately operang the door of a chilter should not clause an alarm, but heaving the door open with	Coolary advants trigger by HECCOOL
	Canada Baraba Maret

Low / High Alarms

You can set an alarm to be triggered once a data logger exceeds a high or low humidity level.

Note: If you try to set the low alarm higher than the high alarm (and vice versa) you will get an error message.

Alarm Hold

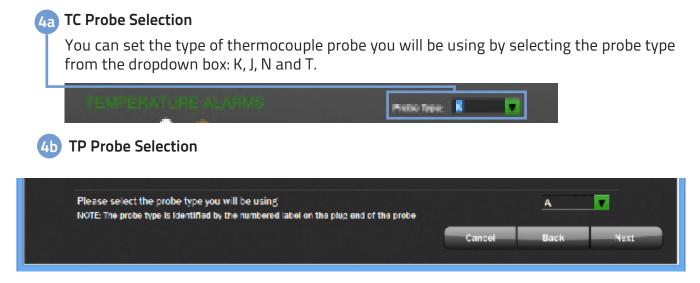
This will hold the data logger in its alarm state even when the humidity has returned to an acceptable range.

For example if the 'High Alarm' is set to 42%RH and the humidity rises to 46%RH it will trigger an alarm. If the reading then drops down to 41%RH and 'Alarm Hold' is switched on, the data logger will remain in an alarmed state. If 'Alarm Hold' is switched off then the data logger would revert back to its normal state. In this situation you can check missed alarms by reviewing the graph.

Section 2.2.2

Select Probe Type

You can set the type of probe you will be using by selecting the probe number or letter from the dropdown box.



Note: i) The probe number can be located on the label attached to the probe cable. ii) Selecting an incorrect probe type will cause measurement inaccuracies.



Once set-up has completed successfully you will see the following screen.



......

Click 'Next' to return to the starting screen.

Go to Section 3.0 - Viewing Data Loggers on a PC

1 Click on the second button to view the data loggers (View Devices).

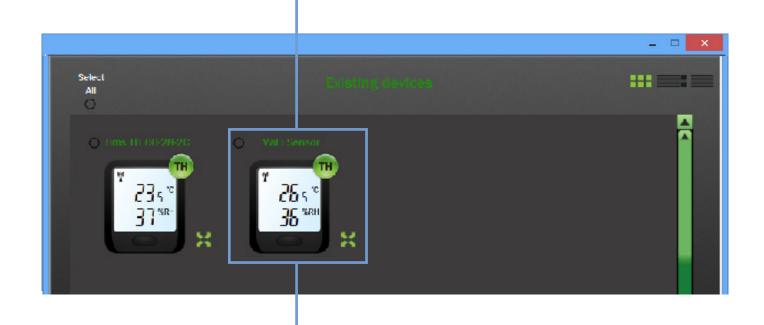
	- 🗆 🗙
Set-Up Device	Ì
View Devices On This PC What's the difference?	
View Saved Data	WiFi

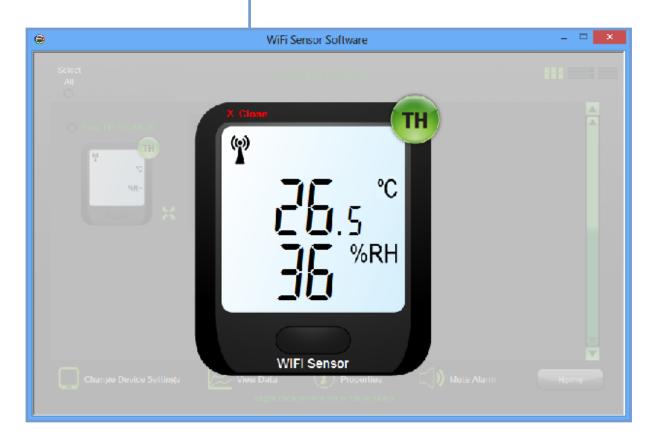
2 Notice the icons in the top right hand corner. Click on these to change the way the information is presented.



Section 3.1 Data Logger Status & Properties

1 In some screens, clicking on a data logger icon will display an enlarged view.





Section 3.2

Data Logger Sessions

Data Storage System (Automatic)

The PC gathers data into sessions.

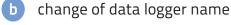
Sessions (in more detail)

The data is split into what are called 'sessions'.

New sessions are started by:

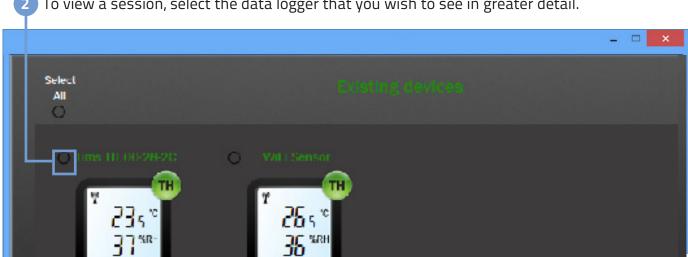


change in sample rate



change in alarm settings

For example a new session will begin when you change the name of the data logger. You may wish to move the data logger from 'Storage One' to 'Chiller One'. The data splits into two separate sessions. The resulting graphs will now be titled correctly.



To view a session, select the data logger that you wish to see in greater detail.

Section 3.2

3

Data Logger Sessions

Click on the 'View Data' icon located at the bottom of the screen and this will display the 'Graphing Sessions' screen.

				V
Change Device Settings	View Data	Properties	C)) Mute Alarm	Home
			- •	
Select the pr	eriod to be displayed on the graph(s):			
	2013	2014		
NUL ►	JUL AUG SEP OCT NOV DEI	C JAN FEB MAR APR	мау	
	01-11-2013 Click on row to view y 28/11/2013 11.01	graph 30 27 - 28/11/2013 11:02:27 2 REAL	D DAYS DINGS	
		-	Back	
Select the period to be displaye	ed on the graph(s):			
	2013		2014	
		43-2013		
		3		2
JUN JUL AUG	SEP CC ⁻ NOV		EB MAR APR	MAY
	4 01-1-1-2010			
	Click on row	/ to view graph 3 11:01:27 - 28/11/2013 11:	02.27 2	30 DAYS READINGS

💪 List of recorded 'sessions'. Click on a row to view the graph.

5 If necessary, drag the date sliders to view sessions within a date range. Note: Arrows 1 and 2 allow you to scroll through the years. Arrows 3 and 4 allow you to select a time period of which to view sessions from.

Section 3.3

Graphing Data

1 To view a graph, select the session by clicking on the relevent row.



2 You can alter the information you wish to view by clicking on the tick boxes below the graph.

.....

Additional Saving Method (Manual)

If you wish to capture a particular event and save this information as a separate file you can do this by opening the graph and selecting 'Save'.

Note: The system will ask you for a file name. Give the file a unique name.

12	View Data – 🗖
File	View 🖥 Save 🔍 🔍 🔇 💩 🛃 Lyport 🔿 Mark Samples 🔿 Statistics 🛛 🎹 Data View
Г	WiFi Sensor
	25.0

Saving and Zoom

Using zoom within a graph, you can zoom in on an event and save this as a separate file. Be aware the graphing program always optimises the view for you, data is not affected, only the way the data set is displayed.

In a graph screen press the 'Export' button and select the required format. Note: Bottom option will only work if you have Excel installed

*	VVID SOBSOLSOHWING 12/257
12	View Data – 🗖 🔀
File View	
🐨 🛗 Save 🔍 🔍 🕚 🎍 🛃	Deport O Mark Samples O Statistics I III Data View
(SV)	(data)
JPEG	(graph)
101	(data) WiFi Sensor
25.0 PDF	(graph)
EXCE	L (data and graph)

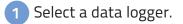
3 Excel will automatically run and import data.

a 17 - 01	· (m)	SheetL - Microsoft I	Excel	Chart Tool:				- 7
Home 1	Insert Page Layout	Fermulac Duta	Review View	Design Layo	ut Format			0 -
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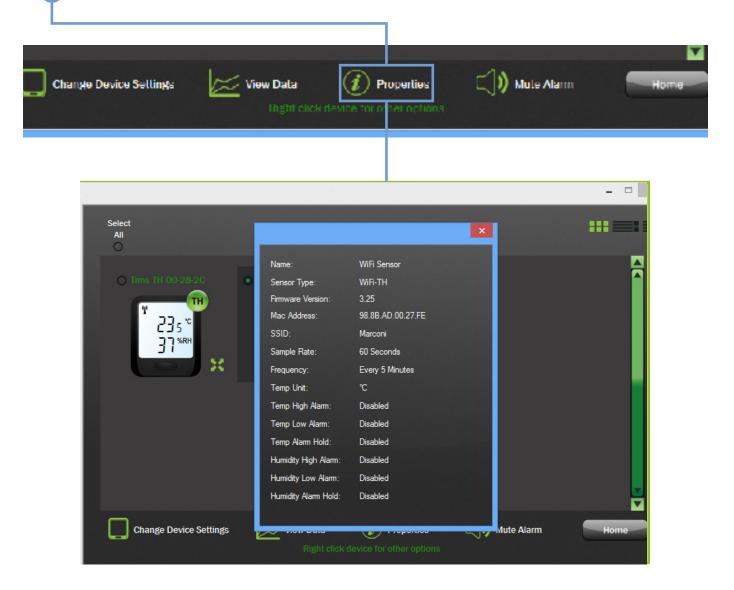
4 You can access the raw data through the second tab in the Excel spread sheets.

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3 3 Time Terspendue(*C) Moniki(//Monie 7 m/ds/2012 result 214 44 10.6 2 m/ds/2012 result 214 44 10.6 4 m/ds/2012 result 215 33 10.6 4 m/ds/2012 result 215 34 10.6 5 m/ds/2012 result 215 12.6 6 m/ds/2012 result 24 12.6 7 m/ds/2012 result 24 10.3 6 m/ds/2012 result 24 42 7 m/ds/2012 result 24 42 8 m/ds/2012 result 24 42 9 m/ds/2012 result 24 42 9 m/ds/2012 result 24 42 9 m/ds/2012 result 24 42 10.3 10 10.3	
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3 2 0%/05/2012(0%10) 21.9 4.8 10.6 4 3 0%/05/2012(0%01) 21.9 4.8 10.6 4 0%/05/2012(0%01) 24.9 4.0 10.6 6 0%/05/2012(0%01) 24. 11.8 7 0%/05/2012(0%11) 24. 12.8 6 7 0%/05/2012(0%41) 24. 42. 7 0%/05/2012(0%41) 24. 42. 10.3 6 9 0%/05/2012(0%41) 24. 42. 0 9 0%/05/2012(0%41) 24. 42.	
4 3 09/05/2012/0930 23.5 48 10.6 5 4 09/05/2012/0930 24 12.8 6 5 09/05/2012/0940 24 12.8 7 6 09/05/2012/0941 24 12.8 8 7 09/05/2012/0941 24 42 10.8 5 6 09/05/2012/0941 24 6 7 09/05/2012/0941 24 42 10.3 5 6 09/05/2012/0941 24 0 9 09/05/2012/0941 24 42 10.3 5 6 09/05/2012/0941 24	-
2 4 09/05/301240990 24 12.8 8 09/05/301240990 24 12 11.8 7 6 09/05/301240990 24 12 8 7 09/05/301240941 24 42 10.8 10.3 10.3 2 8 09/05/201240941 24 4 2 10.3 0 9 09/05/201240941 24	
e 9 99,05,2012,09910 2x 10.8 7 6 99,05,2012,09910 2x 12.8 E 7 99,05,2012,0941 2x 42 10.3 E 5 99,05,2012,0941 2x 42 10.3 F 6 99,05,2012,0941 2x 42 10.3 9 90,05,2012,0942 2x 42 10.3	
7 6 09,05,2012 C094D 24 10.3 8 7 09,05,2012 C094D 24 42 10.3 5 6 09,05,2012 C094D 24 42 10.3 6 6 09,05,2012 C094D 24 42 10.3 6 6 09,05,2012 C094D 24 42 10.3	
8 7 99/455/2012/0941 24 42 10.3 9 99/355/2012/0941 24 42 10.3 0 9 99/357/2012/09441 24 42 10.3	
g 6 09/05/20120941 24 42 10.3 L0 9 09/05/20120941 24 42 10.3	_
10 9 09/85/2012/0941 24 42 10.3	
	-
11 10 09/05/2012 09:41 24 42 10.3	
12 11 09/05/201209.41 24 42 10.3 13 12 09/05/201209.41 24 42 10.3	-

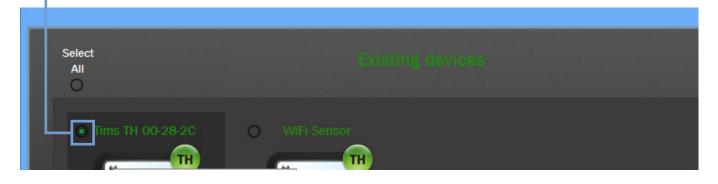
Data logger properties gives you a summary of all your data logger settings.



2 Click on the 'Properties' icon at the bottom of the screen.



To adjust data logger settings over the air, select the data logger that you wish to change.



2 Click on the 'Change Device Settings' icon located at the bottom of the screen and this will take you to the General Settings screen.

Chanye	Device Properties Device Properties Device Settings View Data (i) Properties Utight click device for other options	Home
Server 17	WIFI Sensor Software	
(Č)	Select sample rate NOTE. This will set how often the device takes readings	
Baller Life	Select how often the device will communicate with the PC, each communication reduces battery life Cancel Back Next	

3 Follow steps as before in section 2.2.

Note: The updates will take effect only when the data logger next transmits.

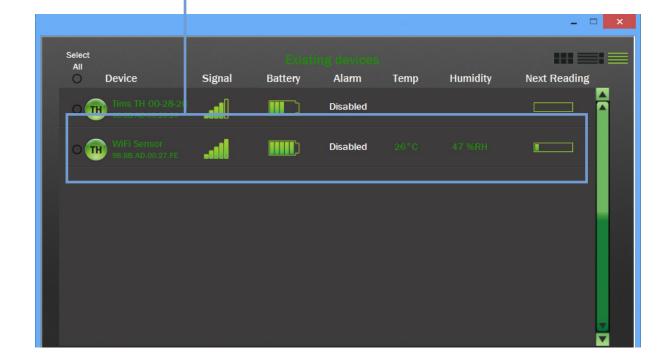
For example In the above example the data logger will communicate every minute so it could take a minute for the data logger to update.

To save power a user may decide to transmit readings once every 30 minutes. In this case it will take at least 30 minutes for the data logger to update settings. If the sensor settings need updating earlier i.e; before the next regular transmission, there is the ability to 'force a transmission'.

Force Transmission

To force transmissions press the data logger button three times until the RSSI (Received Signal Strength Indication) screen is displayed. The data logger will transmit every few seconds while this screen is displayed and will finish after a minute or when the button is pressed.



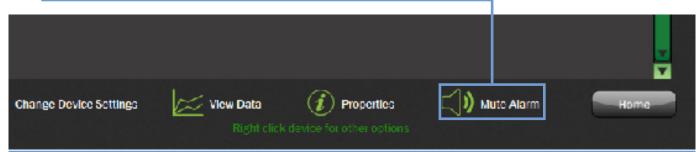


Section 4.2

Muting & Resetting Alarms

To mute alarms generated by the PC software, click on the 'Mute Alarm' icon located at the bottom of the screen.

Note: This will mute all sounding alarms on your PC. There is no need to individually select them.



When the data logger reading has returned to an acceptable range, the alarm can be reset in one of two ways.

2 At the data logger, by briefly pressing the button.

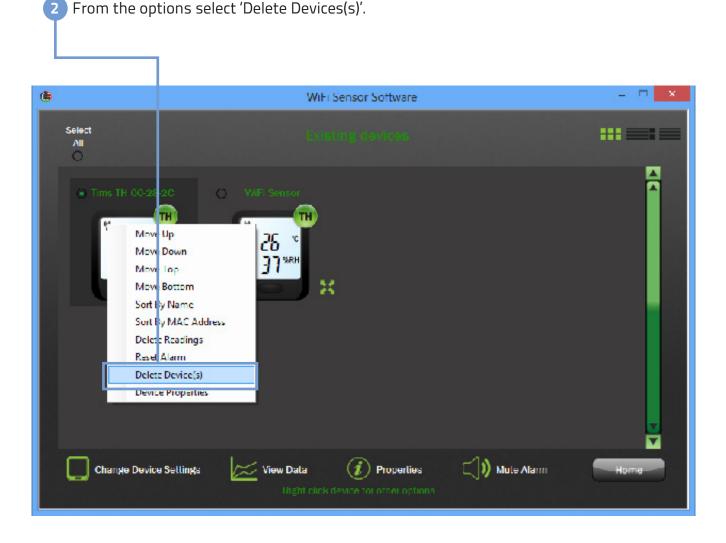
In the software, by selecting the 'Reset Alarm' option from the drop-down list. The alarm will be reset when the data logger next transmits.

47 C	Move Up Move Down Move Lop Move Bottom Sort By MAC Address	
	Delete Readings Reset Alarm	
	Delete Device(s) Device Properties	•

You can delete data loggers. This will delete the data logger from the PC program including all 'sessions'. **('sessions' are detailed more in section 3.4.2, Saving Data.)** It will not delete any files you have specifically 'saved' from the graph.



Select a data logger from a view and right click.



Note: If you have multiple data loggers selected, then all those selected will be deleted.

You will then be given the option to archive the data logger data. This will save all the data logger sessions as .txt files locally to your PC which can be viewed at a later date.

Viewing Previously Saved Data

Click on the third bu	itton to view previously saved data.	
۲	WiFi Sensor Software	<mark>×</mark>
B	Set-Up Device	2
	View Devices	
	View Saved Data	WiFi
les Not Sign	ned In	

This allows you to view any files you have saved from the graph. (see section 3.4 - Saving Data)

Section 6.0 Cloud Account: Sign-In and Set-Up

This Section Is For Cloud Users

Start the Diligence WiFi software by double clicking the desktop icon.



2 To sign into your Comark Cloud Account on the Diligence WiFi Software click the green 'Sign In' button and then enter your account details into the fields that appear. Finally click 'Sign In' to log into your account.

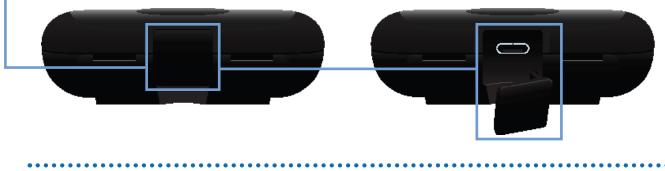
	- 🗆 🗙
Have a cloud account?	
	i
Email	
Password	
Forgotten Password	
View Saved Data	



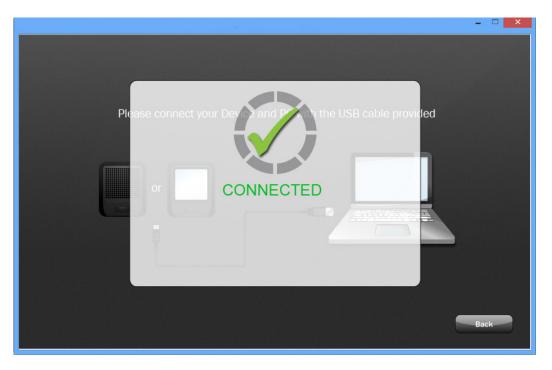
Click 'Set-Up Device' button and choose 'On The Cloud'.
 (If a firmware upgrade message appears on the screen at this stage, refer to section 8.4 Firmware Updates.)

* 😁 Diligence WiFi - Professional 1.30.62		– 🗆 X
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	Set-Up Device OR OR OR On The Cloud On This F	
	View Devices	
	Advanced Tools	WiFi

4 Connect the data logger to your PC using the USB cable provided. The USB socket on the data logger is protected by a rubber bung, remove this to gain access to the socket.



Note: If the data logger connects successfully you will see the following screen. If it fails, check the cable is fully connected to the data logger and PC. The software will automatically try again.



5 Scanning

When the message 'scanning' appears the data logger is listening for wireless networks that are currently in range. Once scanning has completed a list of available networks will be displayed. If the list is blank press the 'refresh connections' button on the top right.

		- 🗆 🗙
	Select a wireless network for the device to connect to: DanaherTM Image: Connect to: Secured wireless network (WPA2) Image: Connect to: AuthorizedGuest Image: Connect to: Unsecured wireless network Image: Connect to: TP-LINK_80415D Image: Connect to: Secured wireless network (WPA2) Image: Connect to: Image: Difference wireless network (WPA2) Image: Connect to:	Refresh connections
Se	ensor Mac Address: 98.8B.AD.00.0C.A9 Sensor Type: RF313-TH Sensor Firmware Version: 2.68	Next

6 Select the network you wish to connect to.

- 7 If you use a hidden network simply scroll to the bottom of the list and select 'Join Other Network' and then fill in your network details.
- 8 Enter the password. Press 'Connect'. After the router has successfully connected press 'Next'.

Note: If the data logger fails to connect to your wireless router the following screen will appear. Follow the on screen instructions and check the four points below.

		- 🗆 🗙
((•))	Select a wireless network for the device to connect to:	2
	DanaherTM Secured wireless network (WP) (a) AuthorizedGuest Unsecured wireless network	Refresh Connections
	TP-LINK_804150 Secured wireless NOT CONNECTED	
	Pastering 1234557 2) Click on the software refresh button convert	
	CANCEL CONNECT Sensor I lac Address: 98.8B.AD.00.0C.A9_Sensor Type: RF313-TH_Sensor Firmware Version: 2.68	
	Cancel Back	Next

- 1) Check your password
- 2) Click on the software refresh button
- 3) Re-orientate the position of your data logger
- 4) Ensure your WiFi router is turned on and within range of the data logger

Go to Section 2.3 for Cloud set-up and 2.4 for PC set-up.

BF300 Instruction Manual

Section 6.0 Cloud Account: Sign-In and Set-Up

General Settings

9 Enter your data logger name. This page shows the default settings for your data logger. Any changes you wish to make can be done through your Comark Cloud Account. Once you have entered your data logger name, click 'Next'.

Note: For some Comark WiFi data loggers, this page will offer you a choice of probe type. Please select the one you wish to use with your data logger before continuing.

Give your device a name Will Sensor (max 20 char.)
Your device will be set-up on the Cloud using the following default settings: Temperature Scale: *G Sample Rate: 1 Minute Transmission Period: 5 Minutes Alarms: Disabled
Audit Check: Off Device Location: New Devices
Note: You can change these device settings later on the Cloud
Cancel Back Next

Once your data logger is set up on your Comark Cloud Account you will get this confirmation screen. Please refer to Section 6.1 to view your data and make further adjustments.



Section 6.1 Set-up New Data Logger on Cloud

Click on the first button to set-up the data loggers (View Devices).

		- 🗆 ×
Q	Set-Up Device	Ì
	View Devices	OR On The Cloud as the dif erence?
Not Signe	View Saved Data	WiFi

2 Click on 'New Devices' to select the data logger to be set-up. Then select 'Change Device Settings'.

			Upgrade F	Home Devices	Administration	Account	Contact Suppo	ort Sign Out
Last updated: 29/04/2014 12:04:49 (UTC +1hrs) C Refresh Now		Devices						
	Co							
Device Locations	Se ect							
New Devices	0 Device 🔺 Name 🔻	signal Signal	Battery Alarm	Reading 1	Reading 2	Status 📥		
Comark	Fridge 1					Setup		
Comark UK Kitchen								
	Devices selected: 1							
	Devices selected: 1				A Page			
Archive / D lete	Change Device Settings	🔀 View Data	Event Logs	Reset Alarn	n i Prop	perties		
		— L <u>i</u>	2	÷				
					SALE MARKETS			

From the 'Change Device Settings' screen you can change the name of the data logger, the temperature scale, sample rate, transmission and alarms.

					Upgrade	Home	Devices	Administration	Account	Contact	Support	Sign Out
			Change	Device Settin	ngs							
			TE	MPERATURE]			
	Device Name	Fridge 1	Temp Scale	°C - Celcius								
		WiFi-T		Disabled								
	Sample Rate	1 Minute	High Alarm	Disabled								
		5 Minutes	Alarm Delay	0 Seconds								
	Audit Check	Disabled	Alarm Hold	Disabled								
		New Devices (UTC +1hr)										
			CANCEL	APPLY								
		Click	APPLY to schedu	le changes to be se	ent to the devic	e			J			
abo												
Device	Name Temp	perature Scale Samp	le Rate Tr	ransmission Period	Alarm Settin & Audit Ch		Email Aler	ts Device	Location			

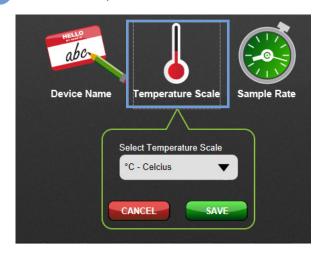
4 Click on 'Device Name' to change the name of a data logger.

Device Name Femperature Scale Sample Rate
Device Name
Fridge 1
(max. 20 char)
CANCEL

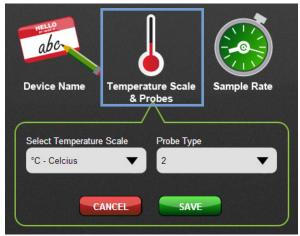
3

Section 6.1 Set-up New Data Logger on Cloud

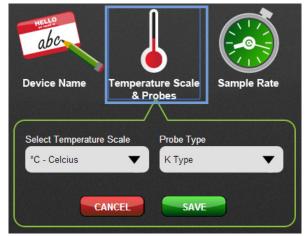
5 Click on 'Temperature Scale' to select either Centigrade or Fahrenheit scale.



6 For Diligence WiFi Loggers with probes, you can select the temperature scale and probe type.

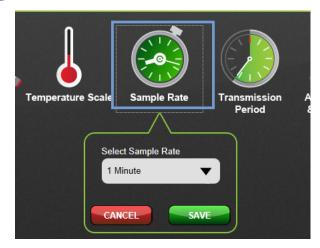


Probe selection for RF312-TP Data Logger



Probe selection for RF314-TC Data Logger 7

Click on 'Sample Rate' to select the timing between temperature or humidity readings.



Hint/Tip: For a Fridge, Cooler or Freezer containing food, sample rate of 30 minutes is the norm.

8 Click on 'Transmission period' to adjust the time period between data transmissions to and from the data logger and Diligence WiFi Cloud.



Hint/Tip: Hint/Tip: For a food service application a 1 hour transmission rate is fine.

9 Click on 'Alarm Setting and Audit Check' to set low and high alarms, the alarm delay period and to enable an audit check on alarms.

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Note: When the Audit Check is selected it enables the user to identify when they physically visit the logger by holding down the button on the front of the device.

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Section 6.1

Set-up New Data Logger on Cloud

10 Click on 'Email Alerts' to select the parameters for an email alert.



The email address of the account holder will automatically be shown in the address list above. Select the user details, then click advanced. Users can manually add additional email addresses so further contacts can receive emails. Entering alarm notification text is optional. If required, a user can insert their own text into the field for alarm e-mails. Set up the Repeat Alert - an alarm can be emailed every 15, 30, 45 or 60 minutes until it is acknowledged. It can also be set to never send an email. Click apply.



12 As changes are made to the settings of a data logger, they show in red on the 'Change Device Settings' screen. Once required changes have been made, click 'Apply' to action. The settings will transmit from the Cloud to the data logger at the next transmission period.

		Change	Device Settings				
TEMPERATURE							
Device Name	Fridge 1	Temp Scale	°C - Celcius				
Device Type	WiFi-T	Low Alarm	Disabled				
Sample Rate	1 Minute	High Alarm	Disabled				
Trans Period	5 Minutes	Alarm Delay	0 Seconds				
Audit Check	Disabled	Alarm Hold	Disabled				
Location	New Devices (UTC +1hr)						
CANCEL							
Click APPLY to schedule changes to be sent to the device							

1 Click on the second button to view the data loggers (View Devices).

	X
Set-Up Device	i
	OR On The Cloud What's the difference?
View Saved Data	WIFI

. . . .

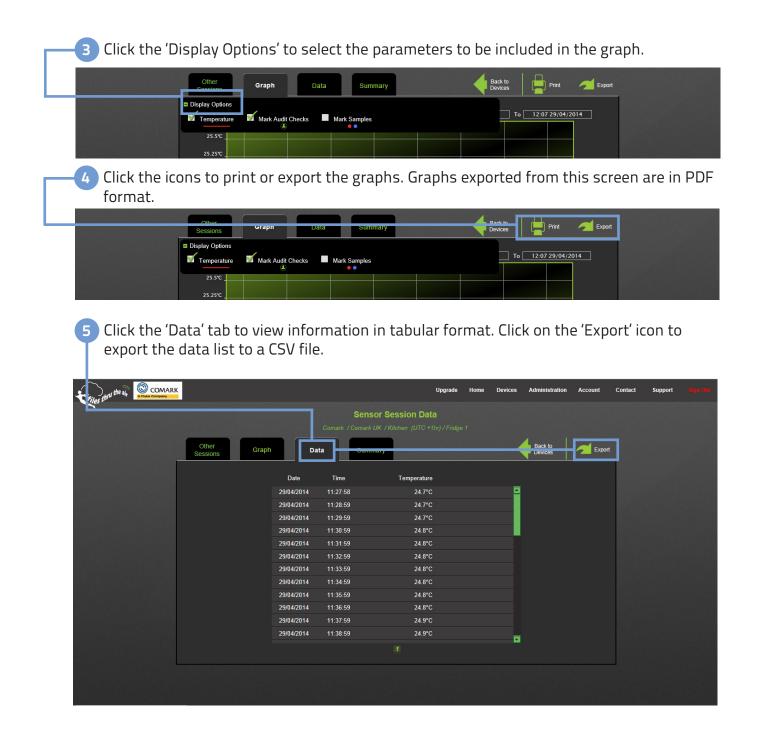
. ..

From the home scree click 'View Data'.	n, click the Devices Tab, select the data logger you wish to view, the	n
COMARK	Upgrade Hom Devices Administration Account Contact Support Main Swa	
Last updated: 29/04/2014 12:02:16 (UTC +1hrs) C Refresh Now	Devices Comark / Comark UK / Kitchen (UTC +1hr)	
Device Locations New Devices	Select All ◯ Device ▲ Name ▼▲ Signal Battery Alarm ▲ Readirg 1 Reading 2 Status ▲	
■ Cornark ■ Cornark UK Kilchen		
	Cevices selected: 0 Decleus joulante ji	
Archive / Delete	Charges Devices Settinges	
javascript:_doPostBack('ctl00\$cph1\$locations','s313\\315\\488')		

2 The graph is shown on the screen. Use the zoom function to select the period visible in the graph. If the mouse is hovered over the graph, the temperature, date and time at that point are shown in an information box.



Viewing Cloud Data and Graphs



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6 Click the 'Other Sessions' tab to view a summary of data sessions. From this screen a 'Session Audit' shows why new data sessions were started. Click on the 'Export' icon to export an Audit in PDF format.

es thru the air Comany	Other Sessions	Oraph Da	Comark / C	Sensor Se Comark UK / Ki			1	Back	tn + 📶	Export Device Audit	1	
	Click on a row to view se	ssion information		Availabl	e Sessions							
	29 April 2014 - 29 Apr	il 2014 1 day			Session	n Audit						
	Session Start 29/04/2014 12:08:47		Time Zone	Readings		-		y : Alison Bu				
		29/04/2014 12:07:59			4	-		Alarm: 0 °C				

7 Click the 'Summary' tab to view a summary of information for the data logger (device), measurement statistics and settings.

		Sense	or Session Data			
Other	Oraph Da	ta Summ	ary	Back to Devices	🗲 Export	
	Date	Time	Temperature			
	29/04/2014	11:27:58	24.7°C	A	100	
	29/04/2014	11:28:59	24.7°C			
	29/04/2014	11:29:59	24.7°C			
	29/04/2014	11:30:59	24.8°C			
	29/04/2014	11:31:59	24.8°C			
	29/04/2014	11:32:59	24.8°C			
	29/04/2014	11:33:59	24.8°C			
	29/04/2014	11:34:59	24.8°C			
	29/04/2014	11:35:59	24.8°C			
	29/04/2014	11:36:59	24.8°C			
	29/04/2014	11:37:59	24.9°C			
	29/04/2014	11:38:59	24.9°C			

Section 6.4

1 From the home screen, click the Devices Tab, select the data logger you wish to view, then click 'Event Logs'.

COMARK	Upgrade Hom <mark>y Devices</mark> Administration Account Co	ontact Support Sign Ont
Last updated: 29/04/2014 12:02:16 (UTC +1hrs) C Refresh Now	Devices	
	Comark / Comark UK / Kitchen (UTC +1hr)	
Device Locations	Select All	
NEW DEVICES	🧕 O Device 🔺 Name 🕶 Signal Battery Alarm 🔺 Readir g 1 Reading 2 Status 🔺	
Comark		
Kitchen		
	Divices selected: 0 Owners in clinica, in	
Archive / Delete	Chlage Davies Sottinge View Date Event Logs Reset Alarm i Properties	
javascript:doPostBack('ctl00\$cph1\$locations','s313\\315\\488')		

Once your data logger is set-up on your Cloud Account you will get this confirmation screen.

Files thru the air COMARK					Upgrade	Home	Devices	Administration	Account	Contact	Support	Sign
				Event Logs								
	Date 🗸 🔺	Time	Time Zone	Device Name 🗸	E	vent 📥						
	14/01/2014	16:30:27	UTC	RH Cloud Sensor	1A Ba	attery OK		Z				
	14/01/2014	16:30:27	UTC	RH Cloud Sensor	1A A	C Power Off						
	14/01/2014	16:48:46	UTC	RH Cloud Sensor		C Power On						
	28/03/2014	14:27:53	UTC	RH Cloud Sensor		attery OK						
	28/03/2014	14:27:53	UTC	RH Cloud Sensor	1A A(C Power Off						
									2			
							н	idden events: 190				
	Clear Log	N	nd This Loa	Filter Events								
	<u>III</u>		in Log									

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3

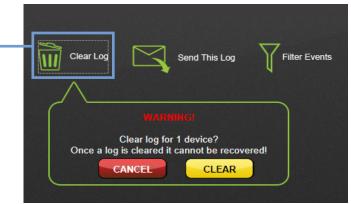
Click on 'Filter Events' to show or hide events such as alarms, low battery, AC Power, loss of connection etc.



Click on 'Send This Log' to email the log data. Users can be selected from a drop down of registered system users.



4 Click on 'Clear Log' to remove the logged data from the list. **Note:** Once cleared from the list the log data cannot be recovered.



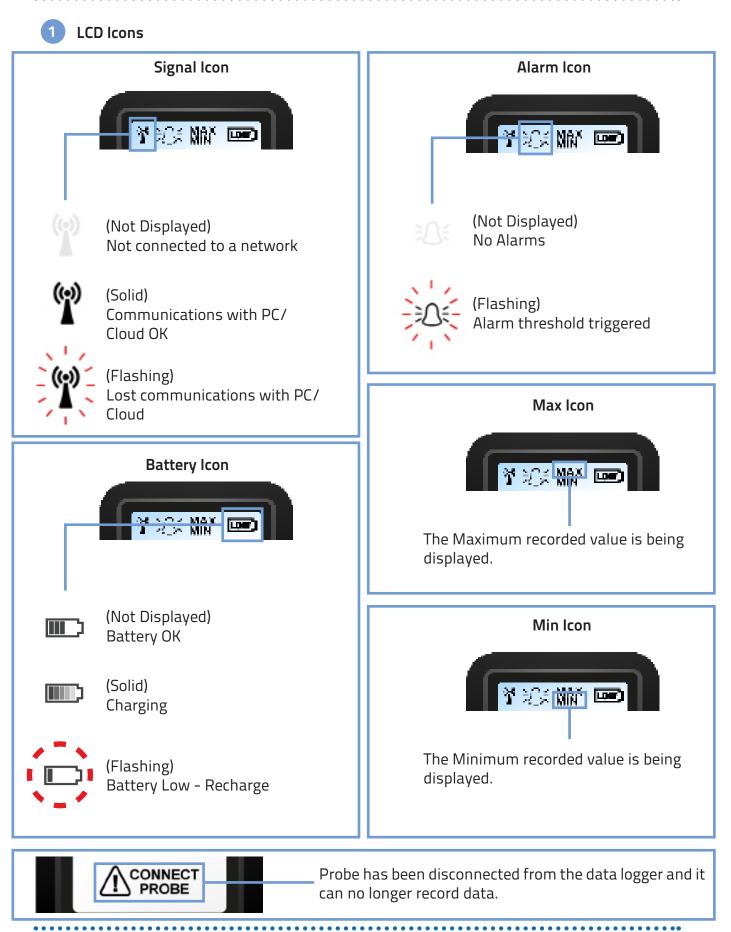
Section 6.4

Resetting Alarms

<complex-block>

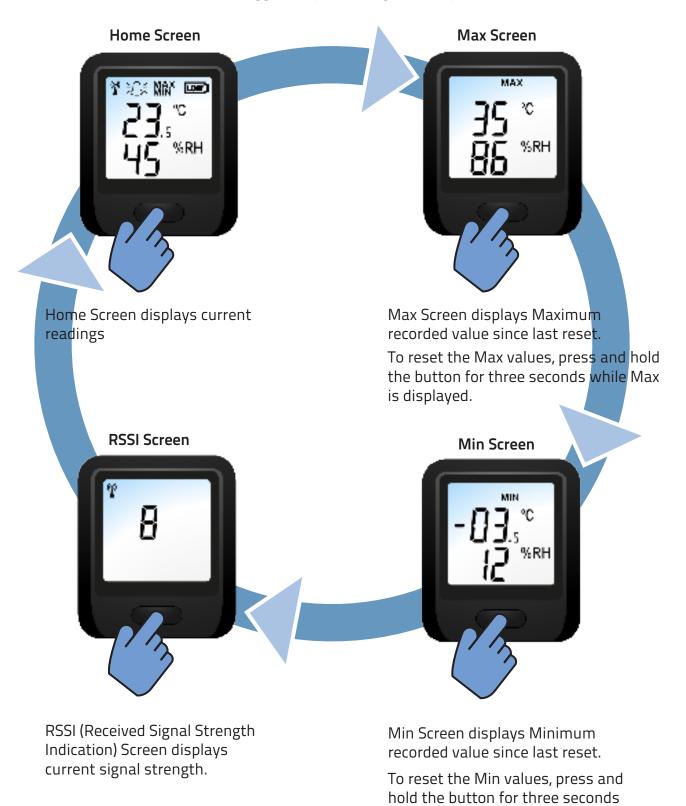
Note: Once 'Reset Alarm' is selected, the data logger will no longer show the alarm in the Devices List or locally on the data logger screen. It should be noted that without remedial action the conditions that triggered the alarm will remain.

LCD Icons



Data Logger LCD Screens

Use the button on the data logger to cycle through the display screens.



RF300 Instruction Manual

while Min is displayed.

Battery Life & Charging

Optimising battery performance:

The data loggers can be powered in one of two ways:



Internal Battery Power

USB/Mains Power

Battery Power

These data loggers contain rechargeable batteries. It is good practice to optimise your system to avoid excessive recharging cycles.

To do this be aware of the following;

- Transmitting uses a lot of battery power. By increasing the time between transmissions the battery will last longer.
 For example; for a short battery life transmit every minute, for a medium battery life transmit every 10 minutes and for a long battery life transmit once every hour.
- 2 The data logger detects when your PC is turned off or the software is closed and enters a power-saving mode. In this mode the data logger wakes-up every 15 minutes to test communications but continues to gather data ensuring that no information is lost.
- 3 When you turn your PC back on, it can take up to 30 minutes for the data logger to synchronize. This saves a lot of power. Under normal circumstances the data logger will synchronize within 15 minutes. If the data logger is mains powered, synchronization will complete within five minutes. Once communication is re-established the data logger returns to its normal transmission rate.

USB/Mains Power

If you have a critical process or do not wish to recharge data loggers, you can opt to have the USB charger plugged in continuously.



Reset / Restore Sensor Data Logger

1 Reset data logger

Warning: The data logger will retain all settings but may lose data that has not been transferred to the PC.

The data logger can be reset by holding the button for 10 seconds. Release the button when LOW is flashing in the top right hand corner of the display or rSt is shown.

2 Restore Factory Settings

Warning: Only use restore when all other methods have failed.

A factory reset can also be performed, hold the button for 20 seconds until appears **FArS** on screen. Doing this will return the data logger to the factory state deleting all settings and clearing all previously recorded data.

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Firmware Updates

Data Logger Firmware Updater

A Firmware Updater is installed with all versions of the Diligence WiFi Software and is accessible via the Start menu.

If you are running a Cloud version of Diligence WiFi and a firmware update is required the following information message appears on screen.

_	onnect your device to the PC with the USB cable pro	ovided
Update F	The device firmware is incompatible with the Cloud, you need to update it. Run the WiFi Sensor Firmware Updater software and follow the on-screen instructions	
		Back

Note: Before starting the upgrade process, the latest Diligence WiFi firmware upgrade will need to be downloaded from the Comark website software page - www.comarkinstruments.com/software.

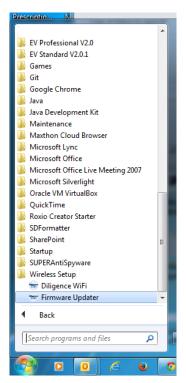
Any data logger already monitoring on a Diligence WiFi PC or Cloud system will need to be removed from the software before updating as the firmware update will reset and delete any data. You will be prompted to archive data when the logger is removed from the software so your temperature and humidity records are not lost. Any settings will be retained.

If there are multiple loggers to upgrade it saves time removing them all, then running the firmware upgrade.

Firmware Updates

Upgrade Procedure

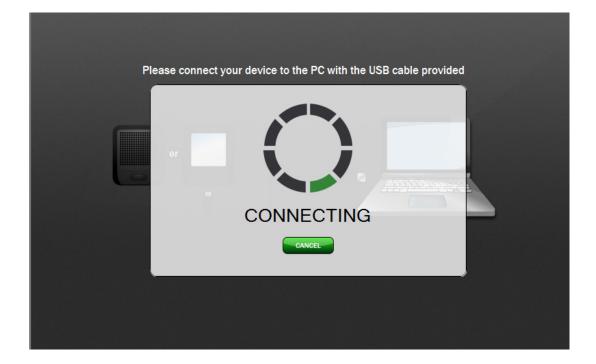
On your PC, Click the 'Start' icon, then select 'All Programs'. Open the 'Wireless Setup' folder and click on the 'Firmware Updater' icon.



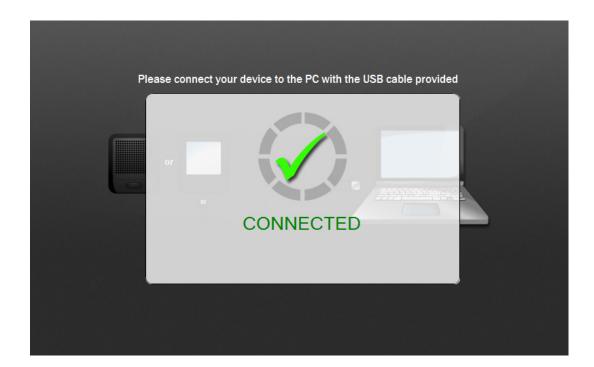
After archiving data and deleting existing data loggers from the system, connect the data logger to the PC via the USB cable provided. Click OK to proceed.



B The screen will show the software connecting with the data logger.



👍 Then it will show when successfully connected.



Firmware Updates

G After a few seconds, the firmware update page will open.

	WIFI DEVICE	FIRMWARE
	Detected Device Pa	rrameters
1	Device Type:	RF312-TP
	Mac Address:	98.8B.AD.00.2E.FE
	Firmware Version:	B3.39
	Hardware Version:	#VR:1:HR1.01
	System:	2.3.12 2.3.12 2.0.46 / 1.06
	Deleted the d	s device before, double check that you have done the following evice from your Diligence WiFi software, archiving any data you need to keep. igence WiFi software.
	Download the lates	t firmware update file for your device from
2		
3	Select the firmware	file
4	UPLOAD	ate the firmware in your device f your device fails to update correctly, please disconnect it from the PC, and press and hold the device button for 20 seconds. This will return the device to the factory state deleting all set ings and clearing all previously recorded fata. When complete, restart the Firmware Updater software and begin the update process again.
lt can b (www.c	e downloade omarkinstru	e firmware file for your data logger model on your PC. ed from Comark Instruments Software page. Iments.com/software). Click 'Upload' to begin and n instructions to run.

6 A successful update will be shown on screen. Click 'OK' to complete the process. The software will close automatically. It is now safe to remove the data logger from the PC and re-add the data logger to the software to continue to monitor temperature and/or humidity.

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Section 8.0

Enterprise Networks

۲	WiFi Sensor Software 1.29.80	- 🗆 X
	Select a wireless network for your device: Image: Control wireless network (WIMA2) Marconi? Scoured wireless network (WIMA2) Marconi? Secured wireless network (WIMA2) Marconi? Secured wireless network (WIMA2) Marconi? Secured wireless network (Enterprise) Secured wireless network (Enterprise) Marconi3 Secured wireless network (WPA2) Marconi4 Secured wireless network (WPA2) Marconi5 Secured wireless network (WPA2) Marconi4 Secured wireless network (WPA2) Marconi5 Secured wireless network (WPA2) Marconi5	Refrash Corriections
	Device Mac Address: 98.88.AD.00.00.73 Device Type: WiFi-TH Device Firmware Version: 3.32	Next

To configure an Enterprise network, enter your username and password. You will also need to select the Authentication type. If you do not know which one to use, please consult your IT administrator.

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Appendix 1 RF300 Email to SMS/Text Service

Applies to US users only

In the United States it is possible to send email alerts from the Cloud Dashboard direct to your phone as text alerts.

Although email can be read on a smartphone, there can be times and situations when more advantageous to receive a short email as a text.

Most of the USA phone providers provide email to text/SMS support so check with your provider to see whether they operate the service. They will also provide the address format for the email to text service they provide. There are often two formats shown, one for SMS and one for MMS messages.

To enable text messages from your Comark Cloud Account, visit the 'Change Device Settings' page and click on email alerts.

Create a new address in the following format:

(10 digit number - your mobile/cell phone number)@(e-mail address for service provider e-mail to text service)

Note: You must also check the "text format" box as this ensures the message is formatted for an SMS.

If you are trying to send an email that is more than 160 characters long, it will be sent through the Multimedia Message Service (MMS). If the person receiving the messaging does not have a messaging plan that includes Multimedia Messaging, then they will not receive the message.

Some carriers also offer email to MMS gateways so if the email exceeds 160 characters, use an MMS gateway instead of an SMS gateway.

Carrier	SMS Gateway Domain	MMS Gateway Domain
Alltel	[insert 10-digit number]@ message.alltel.com	[insert 10-digit number]@ mms.alltelwireless.com
AT&T	[insert 10-digit number]@ txt.att.net	[insert 10-digit number]@ mms.att.net
Boost Mobile	[insert 10-digit number]@ myboostmobile.com	[insert 10-digit number]@ myboostmobile.com
Cricket Wireless		[insert 10-digit number]@ mms.cricketwireless.net
Project Fi		[insert 10-digit number]@ msg.fi.google.com
Sprint	[insert 10-digit number]@ messaging.sprintpcs.com	[insert 10-digit number]@ pm.sprint.com
T-Mobile	[insert 10-digit number]@ tmomail.net	[insert 10-digit number]@ tmomail.net
U.S. Cellular	[insert 10-digit number]@ email.uscc.net	[insert 10-digit number]@ mms.uscc.net
Verizon	[insert 10-digit number]@ vtext.com	[insert 10-digit number]@ vzwpix.com
Virgin Mobile	[insert 10-digit number]@ vmobl.com	[insert 10-digit number]@ vmpix.com
Republic Wireless	[insert 10-digital number]@ text.republicwireless.com	