



WatchDog

3000 Series Wireless Stations

PRODUCT MANUAL

3210xx, 3220xx, 3230xx, 3240xx, 3250xx



Spectrum[®]
Technologies, Inc.

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GENERAL OVERVIEW

Thank you for purchasing a WatchDog 3000 Wireless Weather Station. The 3000 Series stations are easy to install and operate. The station features internal modem/radio and integrated solar power. Connects via Bluetooth to smartphones running the free WatchDog Mobile app. Use the app to configure the station and check current conditions.

INSTALLATION

Preparation

The weather station should be located in an open, unobstructed, grassy area to ensure accurate measurement of wind, rainfall, sunlight, and evapotranspiration.

Mounting hardware is provided to attach the weather station to a mast/pole with a 1.25 to 1.66" (32 to 42mm) outside diameter and a wall thickness of at least 0.13" (3.3mm). The mounting pole should be securely anchored perpendicular to the ground.

For mounting at an approximately 6 foot (1.8m) height, a 1.5 inch (40mm) OD or larger pole should be used for any station with a rainfall sensor. If that size is not available, then the station should be mounted on a tripod, such as Spectrum Technologies item # 3396TPS. Mounting the station at a greater height requires both the 1.5 inch (40mm) OD or larger pole and guy wires to keep the station from swaying in the wind.

If you are using the mounting tripod, open it and place it where the weather station is to be located. The tripod feet can also serve as mounting brackets if the unit is located on a solid surface. Slide the 3' post through both center screw clamps, adjust the height as desired and tighten the screws so that the post is perpendicular to the ground.

Assembly

Tools Required: 1/2 inch (13mm) wrench
 #2 Phillips screwdriver

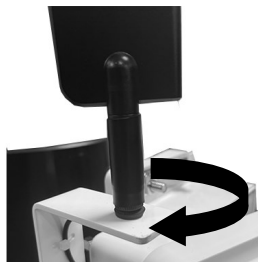
The majority of the assembly of each 3000 Series Wireless Station is completed prior to shipment. Some parts are not attached to protect them from damage in shipping. The final assembly can be done either at the installation site or on a table for convenience.

If final assembly is being done at the installation site, mount the station to the pole with the provided U-bolts. Use a 1/2 inch (13mm) wrench to tighten the nuts. Face the solar panel south in the Northern Hemisphere or north in the Southern Hemisphere.

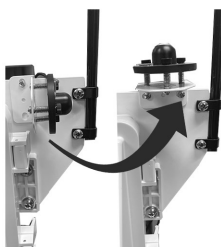
INSTALLATION

Assembly — Continued

1. For all models except 32nnDR: Attach the antenna to the top of the bracket by twisting it into the connector. Connect the antenna (finger tight) such that it does not unscrew. If you have a Temp Alert Station, go to step 5.

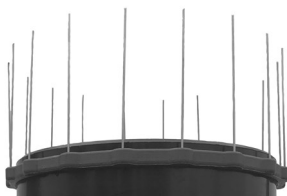


2. *For Weather and ET Stations:* Attach the anemometer arm to the front of the bracket using the provided screws. The arm should extend parallel to the bracket. Attach the wind cups and wind vane using the included Allen wrench.



3. *For ET and Plant Growth Stations:* Slightly loosen the left screw and remove the right screw from the Light Sensor bracket. Rotate the sensor into position and replace the right screw.

4. *For Rain, Weather, and ET Stations:* Open the Bird Guard packaging and follow the included instructions.



INSTALLATION

5. Unlatch the enclosure latches and open the front door of the enclosure. The sensor connection requirements are as follows:
 - Temperature/RH: Already connected on all models.
 - Rain: Already connected on Rain, Weather, and ET Stations.
 - Wind: For Weather and ET Weather Stations, connect the cable from the anemometer into port labeled *Wind*.
 - Solar Radiation Sensor: For ET Weather Stations, connect the cable from the sensor to port D after station is deployed.
 - PAR Light Sensor: For Plant Growth Stations, connect the cable from the sensor to port D after station is deployed.
 - Optional external sensor. If one was purchased, connect it to an available port.
6. Confirm that all sensor cable connectors are securely pushed into their sockets.
7. If not already installed onsite, mount the station to the pole with the provided U-bolts. Use a 1/2 inch (13mm) wrench to tighten the nuts. Face the solar panel south in the Northern Hemisphere or north in the Southern Hemisphere.

INSTALLATION

Initial Power-Up

1. Open the door and slide the power switch to the “ON” position.
2. Monitor the LED. You should see the following signals. The LED will be off for several seconds between these.
 - a. Long Green to indicate startup is occurring.
 - b. Fast Green/Amber/Red to indicate startup is complete.
 - c. Short Amber flash when initial data is sent to SpecConnect.
 - d. Short Green flash indicating the transmission was successful, or a short Red flash to indicate that it failed.

Steps c. and d. do not apply to data recorders (DR models)

3. Configure the device with one of the two options: Bluetooth with the WatchDog Mobile app on a smartphone (see page 7) or SpecConnect with computer (see page 12). Please note that for the Weather and ET Stations, the Wind Vane can only be configured (to identify “North”) using WatchDog Mobile.

WINTERIZING

WARNING

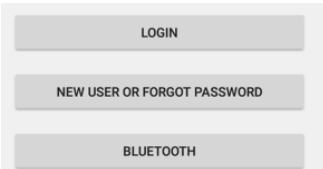
If you are removing the station at the end of the growing season and storing it until spring, be sure to open the door and slide the power switch to the “OFF” position. This will preserve the battery until you need it again. Leaving the station powered on without providing sunlight will discharge the battery completely and destroy at least half of its charging capacity.

CONFIGURATION

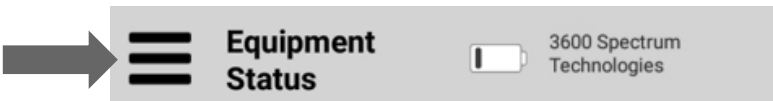
WatchDog Mobile (Bluetooth)

1. Download the free WatchDog Mobile app from the app store (Apple or Google Play) to your phone. If it is already installed, check that you have the latest version.
2. Turn on the station's Bluetooth radio by pressing and holding the "Select" button until the Status LED lights (less than 1 second). The LED will repeatedly quick flash until it connects to a smartphone. The flash will be green if the battery level is 80% or above, amber if it is below 80%, and red if it is below 40%.
3. After opening the WatchDog Mobile app, there are two ways to connect to the station via Bluetooth.

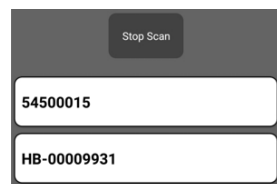
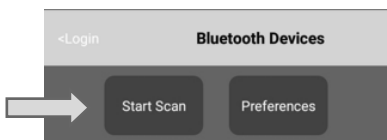
- a. If you are not sending data to SpecConnect, simply press the "Bluetooth" button. The app will take you to the Bluetooth Devices screen.



- b. If you will be sending data to SpecConnect, press the "Login" button and enter your login credentials. The app will take you to the Equipment Status screen. Tap the menu button (3 parallel lines) in the top left corner and select "BLUETOOTH" from the list of options. The app will take you to the Bluetooth Devices screen.



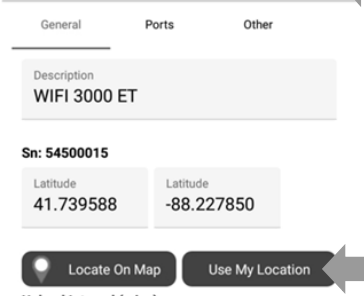
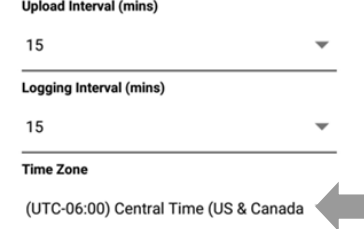
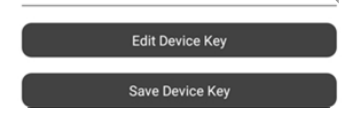


4. In the Bluetooth Devices screen, tap "Start Scan" and select the station's serial number from the list of found devices.



CONFIGURATION

WatchDog Mobile - Continued

- Click on the settings (gear-shaped) icon. This will take you to the configuration page.
- Click the “General” tab located on the top left of the screen.
- Set Latitude and Longitude by clicking the “Use My Location” button. Alternatively, the “Locate on Map” button can also be used for setting Latitude and Longitude.
- Set the Time Zone using the drop-down menu at the bottom of the screen.
- For the 3000 Pup stations (item numbers ending DU, DE, DA), “Upload Interval” and “Time Zone” above are replaced with “Radio Channel”. Set it to the channel used by your Retriever (it defaults to 0).
- If an additional sensor is connected to an external port (port D or E), configure it by tapping the “Ports” tab at the top of the page.
- Once complete, tap the Save icon in the top right corner. Changes will appear in SpecConnect within 5 minutes.

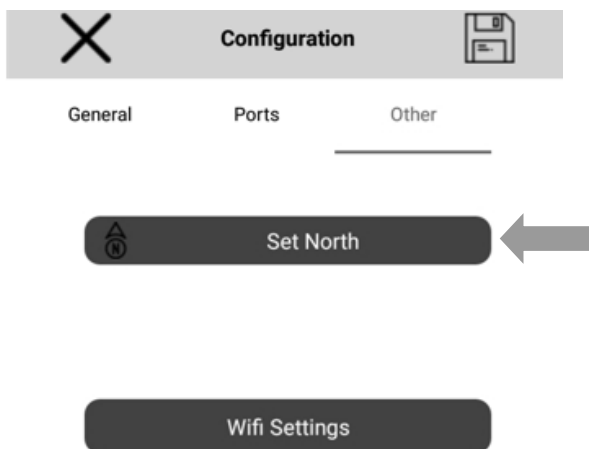
Note: To protect the Series 3000 station settings from being modified by other app users with Bluetooth access, you can set a device (write) key, by tapping the **Edit Device Key** on the configuration page. This key can be shared with other *privileged* users to make changes on the device after they have saved the key within their app (**Save Device Key**). Attempting to change settings on a device without the correct key will generate a “Permission Denied” error.

CONFIGURATION

Set North for the Wind Vane

The Wind Vane on the Weather and ET Stations senses where it is pointing with respect to the anemometer arm, not the Earth. You must use the WatchDog Mobile app to configure the station to “know” which way is North.

1. If you configured your station using SpecConnect, please follow all the instructions on page 7 to use the WatchDog Mobile app with Bluetooth connectivity.
2. Click the “Other” tab located on the top right of the Configuration page.
3. Tap the “Set North” button.
4. Point the wind vane in the north direction. When the “Are you ready?” prompt appears, tap “Yes”.
5. You should see “Success—North Set”. Tap OK, then tap the Save icon in the top right corner.



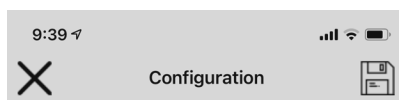
CONFIGURATION

Connecting to a WiFi Network

In order to connect your station to a WiFi network you will need the network's Access Point name (SSID) and its passphrase (password).

1. If you haven't already, please follow all the instructions on page 7 to use the WatchDog Mobile app with Bluetooth connectivity.

2. Click the "Other" tab located on the top right of the configuration screen.



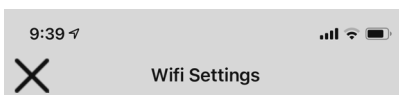
3. Tap the "WiFi Settings" button.



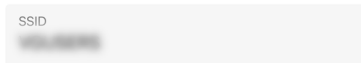
4. Enter the SSID and the Passphrase. Tap the "Save WiFi Settings" button. Then tap the "X" in the upper left corner to exit configuration and display the "Bluetooth Devices" screen.



5. To confirm your connection, tap the serial number, then the "thermometer" icon to get current conditions (see Live Readings p. 13).



6. Tap the "Upload to the Cloud" icon in the upper right and wait up to 30 seconds for the current conditions to display with the "Time Since Last Upload" changed to "0 minutes".



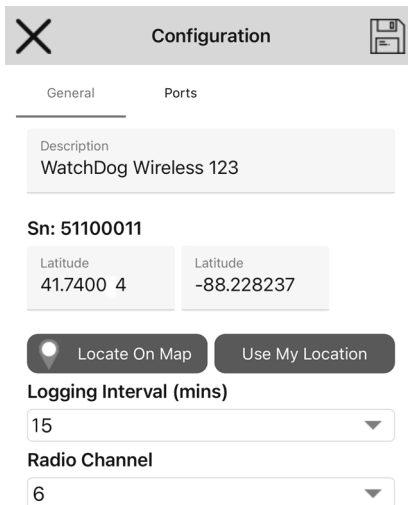
CONFIGURATION

Connecting to a Retriever & Pup Network

If you are setting up a new network, please see the “WatchDog Retriever & Pup Product Manual” for complete instructions. To add a 32x0DU, 32x0DE, or 32x0DA station to an existing network, use the following steps.

1. Change the Radio Channel to the one set in the Retriever. Tap the Save icon.
2. If the network's Retriever is not already in Setup mode (LED flashing AMBER continuously), press and hold its button for 2 seconds.
3. With the 3000 Station at its desired location, press and hold its SELECT button for 2 seconds. The LED will display the signal strength. If the LED is RED or AMBER, move the station, use an antenna extension, or add a Repeater.
4. After the last Pup is deployed, return to the Retriever and hold the button for 2 seconds to enter Active mode (the LEDs will stop flashing amber). This saves battery life.

NOTE: If the 3000 Series Station is part of a Retriever and Pup network that uses SpecWare (instead of SpecConnect) to store and analyze data, SpecWare 10 is required.



The screenshot shows the 'Configuration' screen with a close button (X) and a save icon (floppy disk). The 'General' tab is selected, and the 'Ports' tab is also visible. The 'Description' field contains 'WatchDog Wireless 123'. The 'Sn' field contains '51100011'. The 'Latitude' field is split into two parts: '41.7400 4' and '-88.228237'. There are two buttons: 'Locate On Map' and 'Use My Location'. The 'Logging Interval (mins)' is set to '15' with a dropdown arrow. The 'Radio Channel' is set to '6' with a dropdown arrow.

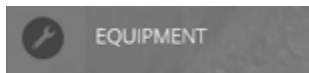
Configuration	
General	Ports
Description WatchDog Wireless 123	
Sn: 51100011	
Latitude 41.7400 4	Latitude -88.228237
<button>Locate On Map</button>	<button>Use My Location</button>
Logging Interval (mins) 15	
Radio Channel 6	

CONFIGURATION

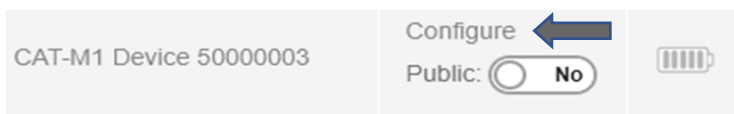
SpecConnect

1. Open a web browser and navigate to www.specconnect.net. Log in with credentials.

2. Click on the “Equipment” tab on the left side of the screen.



3. Navigate to the device on the equipment page and click the “Configure” button.



4. Set the time zone.
5. Configure any additional sensors connected to an external port.
6. Make any other desired changes including station or sensor name.
7. Once complete, tap the save button in the bottom left corner.
8. The device setup is almost complete. If applicable, the wind vane must be calibrated for North. This must be done at the installation site using a Bluetooth connection to the WatchDog Mobile app on a smartphone (see page 9).

Device Name

Latitude **Longitude** **Altitude**

Logging Interval (mins) **Upload Interval (mins)**

Time Zone

Port#

A

B

... 1 ✕

... 2 ✕

C

... 1 ✕

... 2 ✕

... 3 ✕

D ✕

E

LIVE READINGS

While connected via BlueTooth to the station, the WD App allows you to check the values the sensors are currently reading.



Current Conditions

WatchDog WiFi Station ESD
54500011

Friday, 18 February 2022 14:35
Time Since Last Upload: 2 minute(s)

Modem Signal Strength
50

Battery Level
100%

Rainfall (3665)
0.00inches

Temperature
24.1F

Relative Humidity
57.6%

Live Readings

Tap the thermometer icon. This will bring up the Current Conditions screen. In addition to the sensor readings, it will also display the station serial number and the date and time of the last data upload.

Manual Data Upload

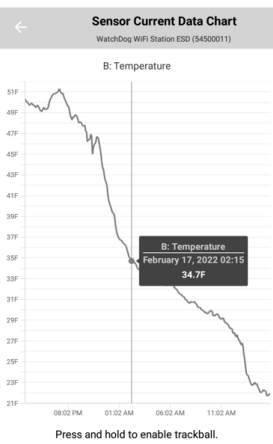
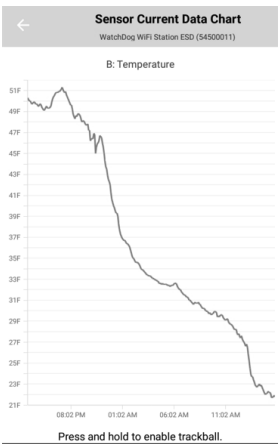
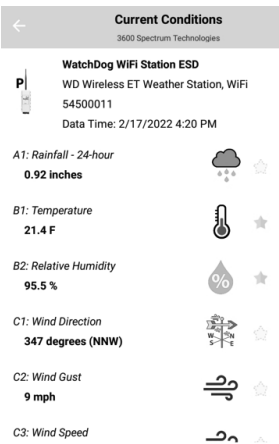
From this screen it is possible to manually perform a data upload. This data will be in addition to the regularly scheduled uploads. This is also a way to confirm the station has a good connection to the web. Initiate the upload by clicking the Cloud button in the upper left corner. If a good condition exists, the time since last download will be refreshed to 0 minutes.

CURRENT CONDITIONS

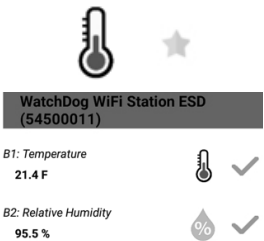
The conditions of the station from the last data upload can be viewed in the WatchDog App or in SpecConnect

WatchDog App

1. Select a station from the Equipment Status screen. Select the thermometer-shaped icon from the options that are displayed.
2. The Current Conditions screen will be displayed. In addition to the sensor readings, it will also display the station serial number and the date and time of the last data upload. Double-clicking on one of the parameters will bring up a graph of that parameter for the last 24 hours. Tapping and holding your smartphone screen will enable the trackball feature which allows you to view the exact value of the data point for a given date and time.



3. If the star icon next to any of the parameters on the current conditions screen is selected, that parameter will appear in the WatchDog App's Favorites section.



SpecConnect

- 1. From the SpecConnect Equipment page, you will see a list of weather stations. Clicking on the station will bring up a dashboard with the current conditions.

Equipment

Product Description ▾

Battery ▾

WatchDog WiFi Station ESD

Ignore: ☐ No ☒ Yes

Configure

No

Current Conditions

Equipment: WatchDog WiFi Station ESD (5450001) ▾

Refresh Rate (minutes):

WatchDog WiFi Station ESD

WD Wireless ET Weather Station, WiFi

54500011

Last upload: 18 minutes ago

Friday, February 18, 2022 3:05 PM

(UTC-06:00) Central Time (US & Canada)

A1: Rainfall - 24-hour

0.00 inches

24 hours

B1: Temperature

26.2 F

B2: Relative Humidity

57.3 %

C1: Wind Direction

181 degrees (S)

C2: Wind Gust

10 mph

C3: Wind Speed

8 mph

D1: Solar Radiation Light

393 W/m²

Absolute Humidity

2.2 g/m³

Dew Point

13.2 F

VPD

0.21 kPa

Wet Bulb

22.3 F

Delta T

3.9 F

Heat Index

21.21 F

ET Ref - 24-hour

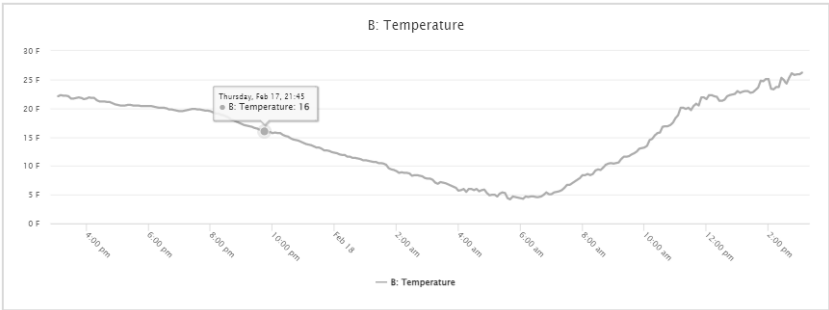
0.03 inches

181° South

8 mph

Wind Gust 10 mph

- 2. A graph of the previous 24 hours of data appears below the dashboard. Floating your cursor over the chart will enable the trackball feature which allows you to view the exact value of the data point for a given date and time.



DOWNLOADING DATA TO A FLASH DRIVE

Logged data can be collected from a WatchDog 3000 station using a USB flash drive. The data will be stored in a file named ssssssss.WD3, where “ssssssss” is the station’s serial number. Note that if there is a previous file by that name on the flash drive, the new data will be appended to the existing data file. The file must be imported into SpecWare Pro (version 9.71 or above) to convert it into an “.swd” text file that can be read by Excel.

Open the door and insert the flash drive in the USB port.

Downloading without a smartphone:

1. Press and hold the “Select” button. The Status LED will light green. When it changes to amber, release the button.
2. The Status LED will return to green while the download is occurring. Three green flashes will indicate the download was successful; three red will indicate a problem (probably either a formatting error (it should be FAT32) or the drive is full).
3. Remove the drive and close and latch the door.

Downloading using the WatchDog Mobile smartphone app:

1. Follow the instructions on page 7 through step 5 to use the WatchDog Mobile app with Bluetooth connectivity.
2. Click the “USB Drive” icon to take you to the “Save to USB Drive” page.
3. Tap the “Save New Records to USB Drive” button to only download data logged since you last downloaded. Or, tap the “Save All Records to USB Drive” button to download all logged data on the station.
4. The Status LED will turn to green while the download is occurring. Three green flashes will indicate the download was successful; three red will indicate a problem [probably either a formatting error (it should be FAT32) or the drive is full].
5. Remove the drive and close and latch the door.



STATUS LED MEANINGS

Depending on the current state of the station, the STATUS LED conveys different information. Except as noted below, the LED color indicates the battery status.

- GREEN = 81-100%
- AMBER = 41-80%
- RED = 0—40%

When connecting or connected via Bluetooth to a smartphone running WatchDog Mobile:

- Quick flash, once per second: Bluetooth is active, but it is not connected to a smartphone.
- On for 1 second, off for four seconds: Connected to the smart phone.

During normal processing with a modem, WiFi, or Pup connection:

- Quick AMBER flash: Start of record upload process.
- Quick GREEN flash: Upload successful.
- Quick RED flash: Upload failed or other communication issue.

During WiFi Configuration:

- Fast flashing: WiFi is connected to the Access Point.
- GREEN on for 3 seconds: WiFi configuration successful.
- RED on for 3 seconds: WiFi configuration failed.

During Power-up (turning the ON/OFF switch ON):
Continuous RED: Fatal firmware error.

USING THE SELECT BUTTON

Short (under 2 second) press (LED turns GREEN):

Turns Bluetooth on.

2 to 4 second press (LED turns AMBER):

Export Logged Data

- Save all records in station flash memory to a plugged-in USB drive. Time varies by the volume of data stored on the station and the USB flash drive used, generally under one minute.
- 5 rapid Green flashes indicate success; 5 rapid RED flashes indicate failure.
- Bluetooth is turned on.

4 to 9 second press (LED turns RED):

Connection Status

- If the button is released while the LED is RED, cellular and WiFi units test the modem's signal strength. GREEN for 3 seconds if good, AMBER for OK, and RED for poor or no signal.

Over 9 second press (LED turns off):

Bluetooth firmware update or WiFi configuration

- After the button is held for over 9 seconds, the LED turns off. When the button is released, the Bluetooth firmware will be loaded from the USB drive and the Bluetooth update process will begin. If the firmware is successfully loaded from USB then the LED will perform 5 rapid GREEN flashes, RED for failure. The actual update process takes about 30 seconds. When complete there will be 5 rapid LED flashes, GREEN for success and RED for failure. If successful, Bluetooth is turned on.
- If the USB luetooth file cannot be accessed, and if the device is WiFi, the Access Point WiFi configuration is started and the LED begins to rapidly flash.

Clearing all records from flash memory:

- With the ON/OFF switch set to OFF, press and hold the SELECT button while setting the switch to ON.
- The LED will turn RED.
- Continue holding the button for at least three seconds.

EXTERNAL SENSORS

The WatchDog 3000 Wireless Stations have an external port for additional sensor input. The following table lists some of the available optional sensors. See www.specmeters.com for a complete list. Most sensors include a 6-foot cable with pin-type connector. Items 3667-20, 6460-20, 6470-20 and 6450WD20 have 20 foot cables.

Item #	Description	Measurement Range	Accuracy
3665R	Tipping Bucket Rain collector	N/A	±2%
3666	Leaf Wetness Sensor	0(Dry) - 15(Wet)	N/A
3667, 3667-20	External (Soil) Temperature Sensor	-40 to 185°F -40 to 85°C	±1.1°F ±0.6°C
3670i	Silicon Pyranometer	1-1250 W/m ²	±5%
3668i, 3668i3, 3668i6 3668A	Quantum Light Sensor and Sensor Bars	0-3000 μmol m ⁻² s ⁻¹	±5%
3676i	UV Light Sensor	0-200 μmol m ⁻² s ⁻¹	±5%
6460, 6460-20	WaterScout SM 100 Soil Moisture Sensor	0% to saturation (typically 50%)	±3%
6470, 6470-20	WaterScout SMEC 300 Soil Moisture/EC/Temperature Sensor	VWC: 0% to sat. EC: 0 to 10 mS/cm, Temp: 0 to 122 °F (-18 to 50 °C)	VWC: ±3% EC: ±2% Temp: ±1.4 °F (0.8 °C)
3669	Soil Moisture Transducer	0-100 kPa	±2%
6450WD 6450WD20	Watermark Soil Moisture Sensor	0 - 200 cbars	N/A
6451	Irrigation Sensor	Switches at 5 psi	±1 psi
3673 3674	Input Cables for user-supplied sensor	0-2.5V 4-20mA	±0.005V ±1%

RAIN COLLECTOR ADJUSTMENT

If rain collector is not reading correctly (or at all):

1. Check the inside of the rain bucket for debris such as leaves that may be blocking the grid at the bottom of the bucket. Remove the rain bucket from the base by loosening the four screws, rotating the bucket slightly counter-wise, and lifting it off. Check for any obstacles (spider webs, debris, etc.) that may be preventing the tipping spoon from moving freely. If the hole beneath the grid gets clogged with dirt, the cotter key can be removed to allow it to be cleared.
2. Using the WatchDog Mobile app, connect to the station via Bluetooth using steps 1 through 5 of the instructions on page 7. Then tap the current conditions (thermometer) icon.
3. Note the current rainfall value. Manually move the tipping spoon back and forth several times. Wait up to 20 seconds for the rainfall value to change. Check that these tips have been recorded. Do this several times.
4. If the tips are being counted, skip to step 6.
5. If the app is not showing any or all of the manual tips of the spoon, it may be that the magnetic sensor on the tipping spoon is too far from the read switch or that the sensor cable is bad. There are two cams holding the axle of the tipping spoon that can be rotated to move the tipping spoon closer to or further away from the read switch. Make this adjustment and repeat step 3. If the app shows that the station recorded the manual tips of the spoon, proceed to step 6. If not, the sensor may need to be sent in for service.
6. If all the tips are being counted, replace the rain bucket and trickle a known amount of water into the bucket. 84 ml of water should register 0.1 inches of water (2.5 mm). This is equivalent to 10 tips of the tipping spoon. The best results are attained when the water is added slowly. It is recommended that the water be put in a ziplock bag which is then punctured with a pin to allow the water to slowly enter the rain bucket.
7. If the reading is slightly high or slightly low, the sensor can be calibrated. When the spoon tips, it lands on screws on either side. If sensor is reading high, lower the screws. If it is reading low, raise the screws. It is recommended to adjust the screws a quarter turn and again run a known amount of water through the bucket to determine if additional adjustment is necessary.

SPECIFICATIONS

Included Sensors by Model

	3210 Temp Alert	3220 Rain Station	3230 Plant Growth Station	3240 Weather Station	3250 ET Station
Air Tempera- ture	✓	✓	✓	✓	✓
Relative Humidity	✓	✓	✓	✓	✓
Rainfall	Opt	✓	Opt	✓	✓
Wind Speed	Opt	Opt	Opt	✓	✓
Wind Direction	Opt	Opt	Opt	✓	✓
Light	Opt (ext. port)	Opt (ext. port)	PAR	Opt (ext. port)	Solar Radiation
Available External Sensor Ports	2	2	2	2	1

SPECIFICATIONS

	Measurement Range	Accuracy
Air Temperature	-40° to 257°F (-40 to 125°C)	±0.54°F (-40 to 194°F) ±0.3°C (-40 to 90°C)
Relative Humidity	10% to 100%	±2% @ 77°F (25°C)
Rainfall	0.01" (.0254mm) resolution	±2% at <2" (5 cm) /hr
Wind Speed	0, 1 to 200 mph (0, 1 to 322 km/h)	±2 mph (±3 km/h), ±5%
Wind Direction	0 to 359°, 1° increments	±3°
Solar Radiation	0 to 1500 W/m ²	±5%
PAR Light	0 to 3000 µmol/m ² /s	±5%

Model # Suffix

Modem/Radio Type

nnnn MU	Cellular LTE-M (CAT-M1, NB-IOT) US, Canada
nnnn ME	Cellular LTE-M (CAT-M1, NB-IOT) Export
nnnn HU	Cellular 3G/HSPA+
nnnn WF	Wi-Fi
nnnn DU	Pup, 900MHz Mesh Network
nnnn DE	Pup, 868MHz Mesh Network
nnnn DA	Pup, 900MHz Australia Mesh Network
nnnn DR	Data Recorder (No Radio)
nnnn CE	Cellular, LTE CAT-4, Europe
nnnn CA	Cellular, LTE CAT-4, Asia Pacific
nnnn C4	Cellular, LTE CAT-4, North America
nnnn MH	Cellular, LTE-M (Hologram SIM)

SPECIFICATIONS

Bluetooth	Version 5.2. For WatchDog Mobile app on smartphones
External Interfaces	USB Type A Port, for Flash Drive AUX Port, Modular connector (RS-232 9600bpi, 6VDC Power out) Power In, 5.5/2.1mm Barrel, 12VDC
LED	3-color (Red, Amber, Green)
External Sensor Port	1 x 2.5mm stereo jack, 0 to 3.0VDC analog input
Data Capacity	30,000 records (312 days at 15 minute intervals)
Power	Integrated 3.5W solar panel, optional 12VDC, Rechargeable 6V/4.5AH SLA battery
Battery Life	14 days minimum with no solar power after battery is fully charged.
Waterproof	IP65
Operating Temperature	-22° to 130°F (-30° to 55°C)
Dimensions (HxLxW)	Housing: 12x19.5x11.25in (30.5x49.5x28.6cm) Antenna: 7.25 in (18.4 cm)
Weight	9.90 lbs. (4.49 kg)

WARRANTY

This product is warranted to be free from defects in material or workmanship for one year from the date of purchase. During the warranty period Spectrum will, at its option, either repair or replace products that prove to be defective. This warranty does not cover damage due to improper installation or use, lightning, negligence, accident, or unauthorized modifications, or to incidental or consequential damages beyond the Spectrum product. Before returning a failed unit, you must obtain a Returned Materials Authorization (RMA) from Spectrum. Spectrum is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company.



DECLARATION OF CONFORMITY

Spectrum Technologies, Inc.
3600 Thayer Court
Aurora, IL 60504 USA

Model Numbers: 3210ME, 3220ME, 3240ME, 3250ME
3210HU, 3220HU, 3240HU, 3250HU
3210DE, 3220DE, 3240DE, 3250DE
3210DR, 3220DR, 3240DR, 3250DR, 3230WF

Description: WatchDog 3000 Wireless Station
Type: Electrical Equipment for Measurement, Control, and Laboratory Use

The undersigned hereby declares that the above referenced product is in conformity with the provisions of:

Directive: 2014/30/EU
Standards: EN 55032: 2015
EN 55035: 2017
EN 61000-6-1: 2019
EN 61000-6-3: 2007+ A1:2011/AC:2012

Michael J. Dunning
Director, Product Strategy

October 30, 2020

Spectrum[®]

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