



# Spectrum® Technologies, Inc.

"To Measure Is To Know"



## Weather Station - Model 3230

(Temperature, Relative Humidity, PAR Light)

### ARE YOUR PLANTS GETTING ENOUGH LIGHT?

More light generally increases plant quality. When the shade cloth is pulled, there appears to be enough light, but your eyes can deceive you! Only by knowing the DLI (Daily Light Integral) can you be confident of growing quality, profitable plants.

### INCLUDED MEASUREMENTS

- Temperature
- Relative Humidity
- Quantum PAR Light
- **ONE Available Sensor Port**

### FEATURES & BENEFITS

- Built in communication, choose the option that fits your needs
- View Data 24/7 on the WatchDog mobile app
- Integrated solar power system
- Internal data logger that holds 10 months of data at a 15-minute recording interval
- One available port for an additional sensor of your choice
- Quick Start installation to get your station up and running
- **Send data to the SpecConnect Cloud**
  - View current conditions or historical data reports from any location
  - View DLI values for the last 24 hours
  - Receive alerts via automated call, text or email within two minutes of the temperature reading crossing your selected threshold

### CHOOSE FROM THREE MODELS

- **STANDARD (C4/MU/WF/DU)** - Includes the 3668S Par Light sensor to measure broadband light sources such as Sunlight, HPS, HID and Fluorescent
- **PRO (C4P/MUP/WFP/DUP)** - Includes the 3668A Full-Spectrum Par Light sensor to measure all light sources, including LED
- **ASPIRATED (C4A/MUA/WFA/DUA)** - Includes an aspirated radiation shield for the temperature/humidity sensor plus the 3668A Full-Spectrum PAR Light sensor to measure all light sources, including LED

### PRODUCT SPECIFICATIONS

VALUE	RANGE	ACCURACY
Air Temperature	-40°F to 257°F (-40°C to 125°C)	± 0.54°F (-40°F to 194°F) ± 0.3°C (-40°C to 95°C)
Relative Humidity	0 to 100%	± 2% @ 77°F (25°C)
Quantum/PAR Light	0 to 2500 $\mu\text{Mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$	± 5%
External Sensor Ports	1 x 2.5mm Stereo Jack (0 to 3.0 VDC Analog Input)	
Operating Temperature	-22°F to 130°F (-30°C to 55°C)	
External Communication	Cellular, WiFi, Radio	
Power Source	3.5W Solar Panel, Rechargeable 6V/4.5AH SLA Battery	
Battery Life	14 Days Minimum Without Solar Power	
Data Capacity	312 Days at 15 Minute Intervals (30,000 Records)	
Dimensions	12"H x 19.5"L x 11.25"W (30.5cm x 49.5cm x 28.6cm) Add up to 7.25" (18.4cm) Depending on Antenna Used	

### COMMUNICATION OPTIONS

Once you know the model you require to gather the data you need, choose the communication method you want to send the data from the weather station to SpecConnect or SpecWare 10 Software.

**3230C4/3230C4P/3230C4A Cellular (LTE-CAT4 Modem)**  
Strongest cellular connection, best for less populated areas where an LTE-M connection can be a concern.

*Requires SpecConnect Cloud Service Subscription*

**3240MU/ 3230MUP/3230MUA Cellular (LTE-M Modem)**  
Best for well populated areas where there is a strong, consistent LTE-M connection.

*Requires SpecConnect Cloud Service Subscription*

**3240WF/3230WFP/3230WFA WiFi Modem**  
Wireless connection where connectivity is strong and consistent, best when weather station will be installed within service range of the WiFi network.

*Requires SpecConnect Cloud Service Subscription*

**3240DU/3230DUP/3230DUA 900Mhz Radio**  
Radio communication using a combination of Pup Stations, Retrievers, Sensor Pups and a DataScout modem to create a network when data needs to be collected from microclimates within a larger field. Must have 1/2 mile line of sight view between devices.

*Requires SpecConnect Cloud Service Subscription OR SpecWare 10 Software Purchase*





# SpecConnect

MANAGE YOUR SITE DATA WHEREVER, WHENEVER

SpecConnect is a Cloud Based service that allows you to access the data from your compatible WatchDog Weather Station on demand from your phone, PC or tablet.

Use this powerful tool as a central point for viewing and evaluating real-time data instantaneously for more informed decision making. SpecConnect can help improve yield and quality, conserve resources, increase profits and decrease risk by viewing current weather conditions and factors.

- Configure your network from your computer, smartphone, or tablet
- Easy and simple to navigate
- 100% customizable dashboard

## INFORMATION AT YOUR FINGERTIPS

- Map view allows you to see all station locations and **Current Conditions**
- Run **Standard Reports** to provide you with the data you need to make informed decisions
- Choose from a variety of **Custom Report Templates**
- Create your own **Custom Template** for full data analysis that can be downloaded
- Choose optional plant disease and insect models
- Receive customized alerts via text or email with the purchase of the **Alerts Function**
- Integrate with your current system by purchasing our **API Service**



# SpecWare Software

Download directly from Spectrum's website to view and report on the data that is most important to you.

## SPECWARE 10 PRO

- Easily download, analyze and produce basic reports
- Gain back valuable time previously used to export data and perform calculations in spreadsheets
- Powerful, easy to use analysis tools
- Graph on-the-fly with an interactive graphing window
- Choose from 16 standard reports, including EFSA and NOAA
- SpecWare automatically assigns each WatchDog Station to its own "location" directory, which is appended every time new data is downloaded
- Find and use data easily with an open file management system - all data is stored in a monthly file, simplifying data sharing and exporting
- Import data files from other applications
- Export data in tab-separated text files to import into other applications, such as Excel
- International features include handling date, time, and numbers with regional formats and choice of Metric or US
- One purchase = one activation for one installation
- Support for the WatchDog 3000 Series Stations, including the NEW 3500 Models and those that are part of a Retriever and Pups network. Download data via USB thumb drive or a direct connection
- Build, customize and save your most important reports
- Run evapotranspiration (ET) reports to effectively manage water use
- Add optional insect and disease models to forecast pest pressures and reduce pesticide costs and produce reports with graphs for each pest - **FREE FOR 30 DAYS WHEN YOU UPGRADE TO SPECWARE PRO!**