

WatchDog® 2000 Series Weather Stations

Base your growing decisions on your weather, not the airport's

- Full-featured weather stations measure temperature, humidity, rainfall, wind, and solar radiation (varies by model). Also monitors degree day models and chill hour data.
- Customize your station with plug-in sensors to meet your needs
- Accurate, real-time weather information directly from your field, orchard or vineyard
- Monitor, record, and analyze over a dozen important environmental inputs
- Log your data in fail-safe, non-volatile memory
- Choose measurement intervals from 1 to 60 minutes (holds 183 days of data with a 30 minute interval)
- Multiple PCs can access the station without impacting data collection
- Use the LCD display to check all current and daily high/low readings without a PC
- Communicate via wireless, cellular, shuttle, or direct connect (see page 24), also compatible with the new WatchDog Station Pups, DataScout™ Modems (see pages 6-15)
- Powered by four AA batteries - 10 months with alkaline (included), 12 months with lithium
- Requires SpecWare™ Pro software (see page 20)

Model 2900ET

- The most powerful package for optimizing your irrigation and IPM decisions
- Measures wind direction, wind speed, air temperature, relative humidity, dew point, rainfall, solar radiation, evapotranspiration, and 5 available external sensor ports

Item 3350WD2 WatchDog® 2900ET Weather Station

Model 2700

- Affordable and versatile solution for growers, researchers, and consultants
- Measures wind direction, wind speed, air temperature, relative humidity, dew point, rainfall, and 6 available external sensor ports

Item 3340WD2 WatchDog 2700 Weather Station

Model 2550

- Ideal for fast, on-demand deployment without measuring rainfall
- Measures wind direction, wind speed, air temperature, relative humidity, dew point, and 6 available external sensor ports

Item 3320WD2 WatchDog 2550 Weather Station

Model 2800

- Ideal where multiple sensor measurements are required for temperature, soil moisture, crop canopy light, or leaf wetness data
- Plug in up to 8 external sensors, plus 1 optional rainfall sensor

Item 3345WD2 WatchDog 2800 Weather Station

WATCHDOG 2000 SERIES WEATHER STATION FEATURES

Sensors	2900ET	2700	2550	2800	Specifications	Accuracy
Wind Direction	✓	✓	✓		1°	±3°
Wind Speed	✓	✓	✓		0, 1 to 200 mph (0, 1 to 322 km/h)	±2 mph (±3 km/h) , ±5%
Air Temperature	✓	✓	✓	OPT	-25° to 212°F (-32° to 100°C)	±1°F (±0.5°C)
Relative Humidity	✓	✓	✓		10% to 100% @ 5° to 50°C	±3% at 20% to 100% and 25°C
Dew Point	✓	✓	✓		-99° to 140°F (-73° to 60°C)	±4°F (±2°C)
Rainfall	✓	✓		OPT	0.01 in (0.25 mm)	±2% at < 2 in (5 cm) per hour
Solar Radiation	✓	OPT	OPT	OPT	0 to 1500 W/m²	±5%
Evapotranspiration	✓					
External Sensor Ports	5	6	6	9		
Available ports for SMEC 300 Sensors	1	2	2	2		
Operating temperature range: -22 to 130°F (-30 to 55°C)						



Model 2900ET
Shown with optional
Tripod Mount



Model 2800

Model 2550

WatchDog® 2000 Series Mini Stations

Monitor microclimates with up to 4 external sensor channels

- Same power, flexibility, and accuracy as the 2000 Series Weather Stations
- Measure temperature, humidity, quantum light, and more (varies by model). Also monitors degree day models and chill hour data.
- Customize your Mini Station with 1 to 4 plug-in sensors to meet your needs
- Accurate, real-time weather information directly from where you grow
- Log your data in fail-safe, non-volatile memory
- Choose measurement intervals from 1 to 60 minutes (holds 198 days of data with a 30 minute interval). Capacity is 89 days when using WaterScout SMEC 300 sensors
- Reliable NEMA-4 type IP 66 enclosure and weatherproof connectors
- Use the LCD display to check current and daily high/low readings without a PC
- Run disease models on the station, providing field viewing of disease severity indicators
- Use the optional alarm output module (page 23) to warn if a sensor exceeds high and low limits
- Communicate via wireless, cellular, shuttle, or direct connect (see page 24), also compatible with the new WatchDog Station Pups, DataScout™ Modems (see pages 4-13)
- 12-month battery power source (four AA alkaline batteries included)
- Requires SpecWare Basic or Pro software (see page 20)



LCD display on all 2000 Series Mini Stations



Model 2475

Model 2475 Plant Growth Station

- Ideal for greenhouses - includes sensors for quantum (PAR) light, air temperature, relative humidity, and 1 available external sensor port
- Computes and displays Daily Light Integral (DLI), dew point, and degree days, live display of current light and cumulative light over the day
- Computes and displays DIF – Average day/night temperatures differences
- Computes and displays VPD – Vapor Pressure Deficit (upgrade required for pre-2013 stations)

Item 3686WD WatchDog® 2475 Weather Station

Model 2450 Temperature/RH Station

- Measures air temperature, relative humidity, dew point, and 2 available external sensor ports

Item 3684WD WatchDog 2450 Weather Station

Model 2425 Temperature Station

- Measures air temperature and 3 available external sensor ports

Item 3683WD WatchDog 2425 Weather Station

Model 2400 External Sensor Station

- Ideal where multiple sensor measurements are required for temperature, soil moisture, crop canopy light, or leaf wetness data
- Plug in up to 4 external sensors

Item 3685WD WatchDog 2400 Weather Station

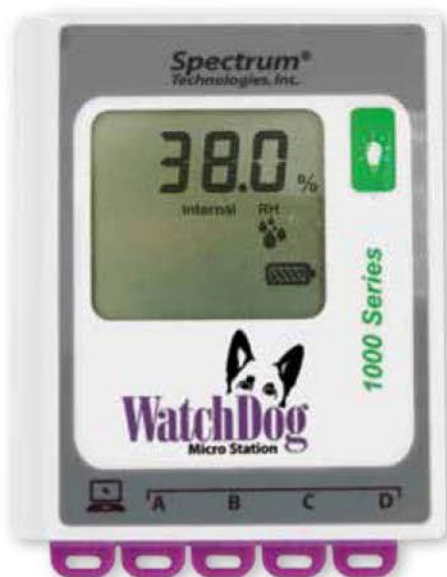
Customize Your Station
See pages 22-23 for our
WatchDog Sensors and Accessories



Model 2400

WATCHDOG 2000 SERIES MINI WEATHER STATION FEATURES

Sensors	2475	2450	2425	2400	Specifications	Accuracy
Air Temperature	✓	✓	✓	OPT	-25° to 212°F (-32° to 100°C)	±1°F (±0.5°C)
Relative Humidity	✓	✓			10% to 100% @ 5° to 50°C	±3% at 20% to 100% and 25°C
Dew Point	✓	✓			-99° to 140°F (-73° to 60°C)	±4°F (±2°C)
Quantum Light (PAR)	✓	OPT	OPT	OPT	0 to 2500 µmol·m ⁻² ·s ⁻¹	±5%
External Sensor Ports	1	2	3	4		
Available ports for SMEC 300 Sensors	1	2	3	4		
Operating temperature range: -22 to 130°F (-30 to 55°C)						



WatchDog® 1000 Series Micro Stations

Micro Stations offer a cost-effective way to record multiple environmental conditions

- Internal sensors can include temperature and humidity (radiation shield recommended (see page 23))
- With up to 4 external sensor ports, you choose the sensors you need
- Up to 8 sensor values with the Model 1650 using the WaterScout® SMEC 300 Soil Moisture/EC/Temperature Sensor (page 39)
- LCD displays current sensor readings and battery level
- Select measurement intervals from 1 to 60 minutes
- Log 10,584 (8,064 with SMEC 300) intervals (220 days at 30 minute intervals)
- Data is stored in fail-safe non-volatile memory
- Water-resistant case (radiation shield or enclosure recommended for outdoor use)
- 12-month battery life (CR2450, included)
- Transfer data with a direct-connect cable or Data Shuttle (page 24)
- **Requires SpecWare™ 9 Basic or Pro software (page 20)**

Operating temperature range: -4 to 130°F (-20 to 55°C)

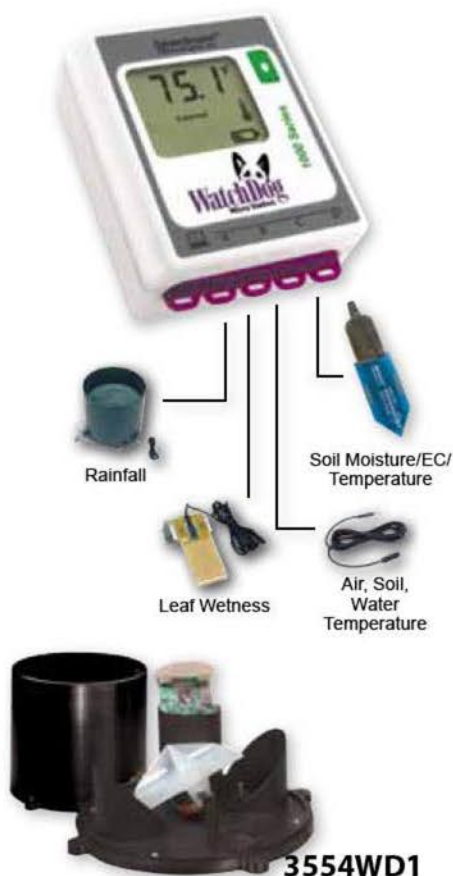
Temperature range: -40 to 185°F (-40 to 85°C)

Accuracy: ±1°F (±0.5°C) at -4 to 122°F (-20 to 50°C), else ±2.2°F (±1.2°C)

RH range: 0 - 100%, Accuracy: ±3% at 77°F (25°C, 10 - 90%), else ±5%

Customize Your Station

See pages 22-23 for our
WatchDog Sensors and Accessories



DESCRIPTION	INTERNAL SENSOR	EXTERNAL PORTS	MAX. NUMBER OF SMEC 300 SENSORS
MODEL 1650 Item 3688WD1	TEMPERATURE RELATIVE HUMIDITY	4	2
MODEL 1525 Item 3687WD1	TEMPERATURE	4	2
MODEL 1450 Item 3684WD1	TEMPERATURE RELATIVE HUMIDITY	2	1
MODEL 1425 Item 3683WD1	TEMPERATURE	3	1
MODEL 1400 Item 3685WD1	NONE (EXTERNAL ONLY)	4	2
MODEL 1250 Item 3682WD1	TEMPERATURE RELATIVE HUMIDITY	NONE	0
MODEL 1225 Item 3681WD1	TEMPERATURE	1	0
MODEL 1200 Item 3680WD1	NONE (EXTERNAL ONLY)	2	1
MODEL 1120 Item 3554WD1	RAINFALL (SEE BELOW FOR DETAILS)	NONE	0
MODEL 1115 Item 3635WD1	REQUIRES EXTERNAL RAINFALL (SEE WEBSITE FOR DETAILS)	1	0

WatchDog® 1120 Data-Logging Rain Gauge

High accuracy, low-maintenance tipping bucket rain collector

- Meets NWS guidelines with an 8 in (20.5 cm) diameter collector
- The included data logger can log up to 10,584 intervals
- Select intervals from 1 to 60 minutes [maximum 10.23 in (26.0 cm) per interval]
- Rain collector mounting bracket and hardware included
- Record rainfall in either metric (mm) or US (in) units
- Accuracy: ±2% at < 2 in (5 cm) per hour
- **Requires SpecWare 9 Basic or Pro (page 20)**

Item 3554WD1 Data-Logging Rain Gauge

WatchDog® A-Series Data Loggers

The most affordable way to track environmental conditions for analysis

- Measure temperature, humidity, leaf wetness and CO₂
- LCD display confirms logger operation and displays last sensor readings
- Select measurement intervals from 1 to 120 minutes
- Log 4,000 to 8,000 intervals in fail-safe EEPROM data memory
- Water-resistant case (IP65 for A150 and A110, IP54 for A125 and A130); A160 is for indoor use only and must be protected from moisture
- Removable soft caps keep ports clear of debris
- Includes CR2 battery, 12-month life (except A160, which requires A/C; international adapter included)
- **SpecWare™ 9 Basic or Pro (page 20) and the A-Series PC Connection Cable are required**

Operating temperature range: -22 to 140°F (-30 to 60°C); A160: 32 to 122°F (0 to 50°C)

Temperature range: -40 to 185°F (-40 to 85°C); A160: 14 to 140°F (-10 to 60°C)

Accuracy: ±1.1°F (±0.6°C) at -4 to 122°F (-20 to 50°C), else ±2.2°F (±1.2°C); A160: ±1.0°F (±0.6°C)

RH range: 0 to 100%, Accuracy: ±3% from 10-90% at 77°F (25°C), else ±5%

CO₂ range: 0 to 9999 ppm, Accuracy: ±50 ppm ±5% of reading (0 to 2000 ppm), else unspecified

DESCRIPTION	INTERNAL SENSOR	INTERVALS	RADIATION SHIELD
MODEL A160 Item 3611A	AIR TEMPERATURE RH, CO ₂	5,333	INDOOR USE ONLY (NO SHIELD AVAILABLE)
MODEL A150 Item 3612A	AIR TEMPERATURE RELATIVE HUMIDITY	5,333	OPTIONAL
MODEL A130 Item 3610A	AIR TEMPERATURE EXTERNAL LEAF WETNESS	4,000	INCLUDED
MODEL A125 Item 3617A	AIR TEMPERATURE EXTERNAL TEMPERATURE	4,000	RECOMMENDED
MODEL A110 Item 3618A	AIR TEMPERATURE	8,000	OPTIONAL

Item 3661A

WatchDog A-Series PC Connection Cable - USB

Item 3663A

Radiation Shield (needed for outdoor use)

WatchDog® B-Series Button Loggers

Space efficient and inexpensive logging technology

- Ideal for shipping containers or situations where multiple areas need to be monitored
- Choose from temperature-only or temperature/humidity models
- Water resistant (IP56) stainless steel case
- Select measurement intervals from 1 to 120 minutes
- Log 2,000 to 8,000 intervals
- Integral non-replaceable battery
- **SpecWare Basic or Pro software (page 20) and the B-Series Docking Station are required**

DESCRIPTION	INTERNAL SENSOR	INTERVALS	LCD DISPLAY
MODEL B102 T/RH Item 3621WD Temp Range: -4 to 185°F (-20 to 85°C) Temp Accuracy: ±1.1°F from 5 to 149°F (±0.6°C from -15 to 65°C) Humidity: 0 to 100%, ±5%	TEMPERATURE RELATIVE HUMIDITY	4000	NO
MODEL B101 8K Item 3620WD Range: -40 to 185°F (-40 to 85°C) Accuracy: ±1.1°F from 5 to 149°F (±0.6°C from -15 to 65°C)	TEMPERATURE	8000	NO
MODEL B100 2K Item 3619WD Range: -40 to 185°F (-40 to 85°C) Accuracy: ±1.8°F from -22 to 158°F (±1.0°C from -30 to 70°C) Use included plastic bag when measuring soil temperature	TEMPERATURE	2000	NO

Docking Stations

Item 3655K1

WatchDog B-Series Docking Station - USB*

Item 3655K

WatchDog B-Series Docking Station - Serial

*Requires SpecWare 9 (v9.1 or later)



3612A



3611A



3617A



B102



B101



B100

Ideal for soil temperature



SciLution

บริษัท ชาญถิ่น จำกัด Scilution Co., Ltd.

Tel : 02 964 8018 | Line ID : @scilution

www.scilution.co.th / www.scilution.net / www.scilution.com

WatchDog Plant Disease Stations

Choose from two types of plant disease stations to monitor current and historical plant disease severity indicators

WatchDog 2000 Series Plant Disease Station

- Wireless communication allows you to receive real-time conditions and send condition alarms to your PC (page 26)
- Includes WatchDog Mini Station Model 2450, leaf wetness sensor and rainfall sensor
- See page 17 for full description of Mini Station
- View current conditions on LCD screen, as well as track severity indicators from onboard plant disease models
- **Requires SpecWare™ Pro software (page 20)**
- University published disease models (sold separately) can be added for more accurate disease and pest monitoring (page 21)

Item 3684WDPD WatchDog 2000 Series Plant Disease Station

WatchDog Plant Disease Micro Station

Data log current conditions and historical plant disease severity indicators

- Includes Watchdog Model 1450 Micro Station, leaf wetness sensor, tipping bucket rain gauge, and radiation shield
- **Requires SpecWare 9 Basic or Pro software (page 20)**
- University published disease models (sold separately, SpecWare 9 Pro required) can be added for more accurate disease and insect monitoring (page 54)

Item 3684PD1 WatchDog Plant Disease Micro Station

WatchDog Plant Growth Micro Station

Monitor conditions crucial to growing high quality plants

- Includes a WatchDog Model 1450 Micro Station, Quantum/PAR light sensor and radiation shield
- **Requires SpecWare 9 Basic or Pro software (page 20)**

Item 3684PAR1 WatchDog Plant Growth Micro Station

WatchDog Irrigation Stations

See page 42 for our selection of Irrigation Stations →

WatchDog Soil/Air Temperature Station

Study soil and air temperature trends across multiple microclimates

- Includes Model A125 Data Logger, external temperature sensor and radiation shield
- **SpecWare 9 Basic or Pro (page 20) and the A-Series PC Connection Cable (page 17) are required**

Item 3617ARS Soil/Air Temperature Station



3617ARS



SciLution

บริษัท ชาญล้ำ จำกัด SciLution Co., Ltd.

Tel : 02 964 8018 | Line ID : @scilution

www.scilution.co.th / www.scilution.net / www.scilution.com