

## **Garden Weather Station Checklist**

Identify the capabilities you would like your garden weather station to have.

### Temperature

- Current Temperature
- High/Low
- Time of day for high and low
- Periodic reading throughout the day
- Temperature readings from multiple locations. List them

### Rain

- Current amount
- Rain rate
- Cumulative amount per storm
- Cumulative amount per month/year (water year or calendar year)
- Periodic readings throughout the day

### Wind

- Current speed
- High sustained speed
- High gust
- Meteorological speed or garden speed
- Direction
- Dominant Direction
- Periodic readings throughout the day

### Humidity

- Current Humidity
- High daily humidity
- Low daily humidity
- Periodic reading throughout the day

### Barometric Pressure

- Current barometric pressure
- Direction of change
- Rate of change
- Periodic readings throughout the day

### Solar Radiation

- Current amount
- Periodic readings throughout the day

### Evapotranspiration (calculated from wind, temperature, humidity, solar radiation)

- Current amount
- Periodic readings throughout the day
- Amount per day, month, year

### UV Radiation

- Current amount
- Daily cumulative amount

#### Other measurements to consider

- Soil Temperature
- Soil Moisture
- Leaf Wetness

#### Data Logging

- Manual daily record keeping
- Automated data logging (requires a station with a communication port)
- Periodic computer connection for data logging
- Dedicated computer for data logging
- Archive Interval

#### Data Sharing

- Citizens Weather Observer Program
- Wunderground or similar service
- Personal weather station data published on your own website

#### Software

- Understand the capabilities of the software that came with the weather station.
- Is third party software available for station?
- Does the software generate graphs and web pages?
- Is open source software available for the station you select?
- Does the software supports the feature set defined above

#### Weather Station sensor communication

- Do you want or need more than one console?
- Wired
- Wireless
- Hybrid

#### Alarms

- Does the console have audible alarms?
- List sensors and conditions for which you want alarms.
  - Example: Greenhouse temp exceeding 95 degrees

#### Power Source

- Power source for console Example: AC with battery backup
- Power source for sensors
  - Powered from console
  - Battery only
  - Solar with battery backup
- Will the sensors be located in an easy place to service?
- Do I want a heater for the rain gauge in winter

#### Documentation

- Is the manufacturer documentation well written and easy to understand?
- Is the documentation available on the manufacturer's website?