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Garden Weather Station Checklist

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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?