Uploading Data

The typical PWS setup consists of a Sensor Array connected to a stand-alone Display Console, either by a wired or wireless (RF) connection.

Sensor Array

Wired or RF Connection

Console/Display

The Console/Display can be connected to a Personal Computer for data archiving using manufacturer-provided or third-party software.

Often, this software comes with the option to send live weather data to the internet.

However, in order to supply continuously updating weather data, the computer must be powered on 24/7. Power Management utilities (sleep mode) and automatic reboots for Software Updates can be problematic. Also, energy use is a consideration.

Computer

Internet

Internet Appliance
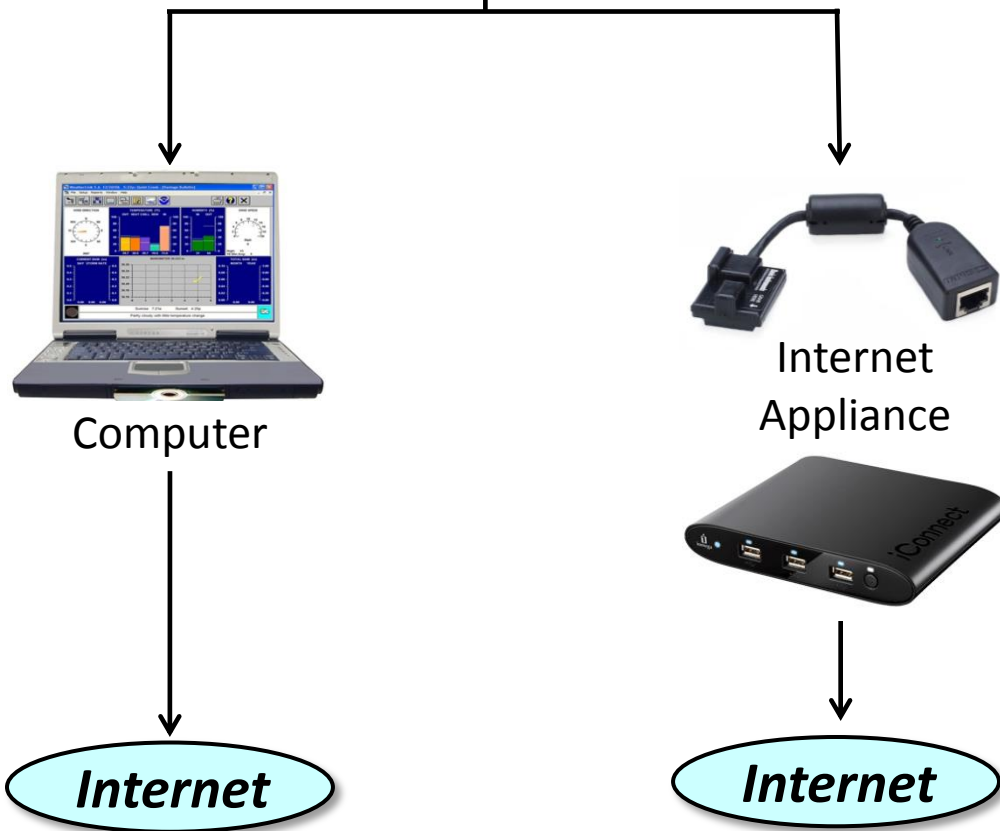
Internet

Several "Internet Appliance" devices have started working their way onto the market in recent years. These surprisingly affordable devices will connect your Weather Station to the Internet without the use of a computer. They generally draw very little electricity, 5-10 watts at most.

Uploading Data - Internet Appliances

There are only two main "Internet Appliances" for Personal Weather Stations at this time. This makes it easy to provide a list, but remember, this is for informational purposes only, and is not intended to be an endorsement!

Davis Weatherlink-IP

Plugs into the back of your Station Console, then to an Internet Router (sometimes routers are built into Cable/DSL/Satellite modems).

Sends data to Davis' weatherlink.com site every minute. The weatherlink.com site can then send the data to CWOP every 15 minutes (this will hopefully be reduced to 5 or 10 minutes soon).

However, it only works with never Davis weather stations – including the Vantage Pro, Vantage Pro2, and Vantage Vue models.

For more information, go to www.weatherlink.com.

MeteoHub

Technically, 'Meteohub' refers to software written by SmartBedded UG, a company based in Germany. The software is intended to be installed on a "Plug Computer," a tiny, energy-efficient solid state computer with no moving parts, which typically retail for $99-$199. (Examples include the *SheevaPlug, DreamPlug, and iConnect*).

Tech-oriented people with access to a Linux-based computer can install the Meteohub software on a Plug Computer themselves, keeping combined costs for hardware and software as low as $150-$200.

Uploading Data - Internet Appliances

MeteoHub (cont.)
There are at least two US-Based licensed re-sellers of "plug-and-play" MeteoHub systems. These are kits that include a Plug Computer with the MeteoHub software already installed, and a memory card for data storage. Cost for these systems runs roughly between $270-$300.

AmbientWeather.com offers the *WeatherHub2* (SheevaPlug – wired LAN) and *WeatherHub3* (Iomega iConnect – WiFi).

The devices can be purchased by themselves, or bundled up with a Weather Station.

RainManWeather.com offers the *WeatherPlug-IP* (Iomega iConnect - WiFi). The devices can be purchased by themselves, or bundled up with a Weather Station.

For more information on **MeteoHub** software, go to the developer's website:
www.meteohub.de

Consider an "UPS"
Weather Station consoles and internet devices feature a very low-power consumption. As a result, they can stay powered on for long periods during power outages when plugged into an Uninterrupted Power Supply ("UPS").

Think about it – electricity tends to go out when the weather is most interesting! If you plug your Console, Internet Appliance, and Modem (Cable/DSL/Satellite) into an UPS, you may be able to continue sending valuable data during severe weather, even if there is a power outage.

(This assumes that the power outage doesn't effect the Cable or Phone line!)

Uploading Data – PC and Software

There are DOZENS of software applications available that can log and transmit Weather Station data to CWOP. Some are freeware, others have a license fee (usually $70 or less).

Most are Windows-based, but there is an increasing number of Mac and Linux-based software packages available.

A partial list of the most common applications follows below.
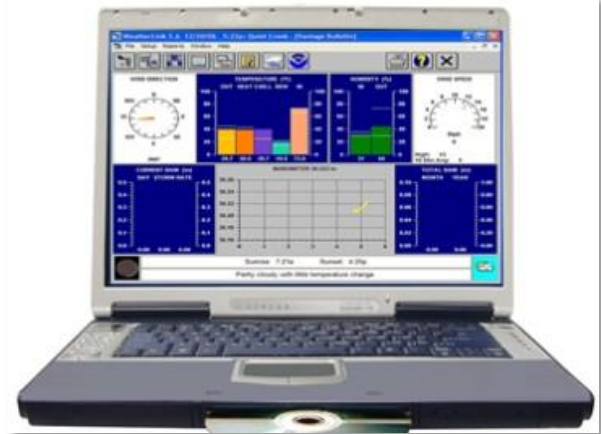
Davis Weather Link (Windows)
Often comes bundled with Davis Weather Stations, can upload to CWOP every 5 minutes.

Virtual Weather Station (Windows)
Works with SEVERAL weather station models. Requires a plug-in called "vwsAPRS" in order to upload to CWOP. Popular with people looking to create custom weather web pages.

Weather Display (Windows, Linux)
Works with SEVERAL weather station models.

WView (Mac, Linux)
Works with SEVERAL weather station models.

WeatherSnoop (Mac)
A newer Mac-based program which supports CWOP.

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