WeatherLinkIP™ for
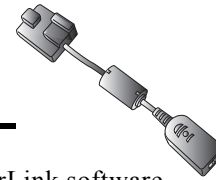# Vantage Pro® and Vantage Pro2™

6555

WeatherLinkIP™ for Vantage Pro® and Vantage Pro2™ consists of our WeatherLink software and a specialized data logger that connects to a Vantage Pro or Vantage Pro2 console or Weather Envoy to a ethernet connection. The software and data logger transfer your Vantage Pro or Vantage Pro2 weather data to your computer, allowing you to create a permanent weather database. Once stored in the database, your weather information can be used to generate a wide variety of reports and graphical displays.

In addition, the WeatherLinkIP data logger automatically uploads your console or Envoy information to a web server provided by Davis Instruments that lets you see your weather data via the Internet without having to set up your own web page. Your weather data is automatically saved to Davis's web servers which provide four times the storage of the data logger. Using the WeatherLinkIP data logger lets you become part of the WeatherLink Network, a collection of websites containing customer weather information that is stored on a server owned by Davis Instruments. Being part of the WeatherLink Network and having a site on WeatherLink.com means you are part of a community of weather enthusiasts who use the WeatherLink Network to view their own weather data and share that weather data with friends and people across the world quickly and easily.

WeatherLink Software Features

- Displays the current weather station data in a real-time "bulletin" on the computer.
- Allows you to set and clear data in the weather station console (time and date, highs and lows, alarm thresholds, calibration numbers, etc.) from the computer.
- Graphs archived weather data on an hourly, daily, weekly, monthly, or yearly basis.
- Generates Weather Watcher reports in the National Climatic Data Center (NOAA) format.
- Collects data from multiple weather stations on the same computer.
- Includes support for GLOBE, an international weather-related science program for students from elementary through high school. Visit www.globe.gov for more information.
- APRS data protocol allows volunteers in the Citizen Weather Observer Program (CWOP) to send real-time weather data to the National Weather Service. CWOP is data used for weather education and research projects. Visit www.wxqa.com for more information.
- Gives you multiple options for connecting to your WeatherLinkIP data logger.

WeatherLink Data Logger Features

- Archives weather data for subsequent transfer to the computer.
- Manages data communication between the weather station and the WeatherLink software.
- Information on WeatherLink communications protocols and data formatting can be found on the Software Support page at our website: (http://www.davisnet.com/support/weather/).
- Automatically sends data to Weatherlink.com without connection to a computer.
- Automatically uploads archive data to the Weatherlink.com website.

Weatherlink.com Website Features

- Gives you a real time summary of your station's current weather conditions.
- Sends daily summary and alarm e-mails.
- Stores archived record data for download to the WeatherLink software.
- Lets you view other weather stations in the WeatherLink Network.
- Lets you setup direct data uploads to other third-party applications and tools, such as CWOP and Globe.

Software Specifications

Software System Requirements

A network or ethernet connection. Computer running Windows™ 98 SE, Windows 2000, XP or Vista with Microsoft .NET 2.0 framework. The amount of disk space necessary for the data files depends on the archive interval. Each archive record in the database is 88 bytes. Every day in the database has an additional two records totalling 176 bytes that store daily summary information. A database containing data stored at a 30-minute archive interval requires 132 KB of disk space per month. The file size changes in a linear fashion depending on the archive interval. For example, data stored at a one-minute interval requires approximately 3.9 MB a month while the data stored at a two-hour interval requires approximately 33 KB a month.

Software Data Display Options

Some of the weather data and reports listed below require optional sensors.

Real-Time Displays (these displays update in real-time):

Graphical Bulletin	Inside Temperature, Outside Temperature, Wind Direction (0°- 360°), Wind Speed, Daily Rain Total, Monthly Rain Total, Year-to-Date Rain Total, Storm Total, Rain Rate, Inside Humidity, Outside Humidity, Barometer, Barometer 6-hour Plot, Evapotranspiration (ET) (day, month, year), Today's Highs and Lows, Forecast Icons, Forecast Text, and Illuminated Fraction of the Moon Disk.
Text-Based Summary	Inside Temperature, Outside Temperature, Wind Direction (0°- 360°), Wind Speed, Daily Rain Total, Monthly Rain Total, Year-to-Date Rain Total, Storm Total, Rain Rate, Inside Humidity, Outside Humidity, Barometer, UV, Solar Radiation, ET (day, month, year), Today's Highs and Lows, Forecast Text, and Moon Phase.
Update Interval	Two seconds (approximately)

Plotting Displays:

Plot Window	Enables graphing of all database information (multiple variables may be plotted on a single graph) over any of the following spans (1 hr, 4 hr, 8 hr, 12 hr, 1 day, 3 days, Week, Month, Year). Multiple dates may also be plotted on the same graph.
Strip Charts	Four stacked line graphs (multiple variables may be plotted on a single graph), which update at the time of each archive interval. Strip charts may use any of the following spans (1 hr, 4 hr, 8 hr, 12 hr, 1 day, 3 days, Week, Month, Year).

Reports:

NOAA Monthly Summary	Based on the National Oceanic and Atmospheric Administration (NOAA) Monthly Weather Watcher report
NOAA Yearly Summary	Based on the National Oceanic and Atmospheric Administration (NOAA) Yearly Weather Watcher report
Yearly Rainfall	Calculates rainfall totals broken down by month and year. Rainfall data may be altered and added to reflect rainfall totals for months and years which are not contained in your weather database.
Degree-Days	Tracks degree-days and progress towards development for an unlimited number of crops or pests; base and upper development thresholds and development totals entered by user.
Temperature/Humidity Hours	Calculates the number of hours the temperature has been either above or below a given threshold, and that during which time the humidity was above a given threshold from a given start date. Typically used to track conditions for the development of agricultural pests and molds.
Soil Temperature Hours	Calculates the time that soil temperature has been above freezing (or some other threshold). Typically used to determine a time to plant crops.
Chilling Requirements	Calculates the number of hours spent below a specified temperature during a specified period of time. Typically used to determine if the coldness requirement for a fruit tree in dormancy has been met.
Bright Sunshine Hours	Calculates amount of sunshine for a selected time period.
Leaf Wetness Hours	Calculates the amount of leaf wetness hours over a time period.
Fuel Demand	Estimates fuel usage based on past usage and outside temperatures.
Total ET	Calculates ET for a selected time period.
Sunrise & Sunset Times	Calculates sunrise and sunset times for any given latitude, longitude and date.

Data Logger Specifications

Network Interface

Network Interface . . . . 10Base-T half duplex

Connector RJ45

Communication Standards . . . . ARP, UDP, TCP, ICMP, TFTP, DHCP, HTTP

IP Address Configuration . . . . DHCP/Manual Static IP Address Configuration

Hardware Specifications

Power . . . . 5VDC from console, 0.5 watts maximum consumption

Operating Temperature . . . . +14° to 140° F (-10° to 60° C)

Console Communication Baud Rate . . . . 19200 serial connection

Data Logger Archived Data

The data logger stores up to 2560 archive records (one 52-byte record per archive interval) for later transfer to your computer. The archive records are stored in 128K of non-volatile memory; protecting the data even if the console loses power. Maxima, minima, averages, and totals are taken over the archive interval.

Archive Record Data . . . . Time/Date of Record, Inside Temperature (last or avg.), Outside Temperature (last or avg.), Maximum Air Temperature, Minimum Air Temperature, Wind Direction (dominant), Wind Speed (average), Maximum Wind Speed, Rainfall (total), Rain Rate, Inside Humidity (last), Outside Humidity (last), Barometric Pressure (last), Solar Radiation, Hi Solar Radiation, UV, Hi UV, Evapotranspiration, Forecast, Leaf Temperature (2), Leaf Wetness (2), Extra Humidity (2), Extra Temperature (2), Soil Temperature (4), Soil Moisture (4), Wind Samples, Wind Tx, Length of Archive Interval, ISS Reception

Archive Interval . . . . User-selectable from the following intervals (in minutes): 1, 5, 10, 15, 30, 60, or 120

Archive Storage Capacity (the amount of time before the archive is completely filled):

1 Minute Archive Interval . . . . 42 hours

5 Minute Archive Interval . . . . 8 days

10 Minute Archive Interval . . . . 17 days

15 Minute Archive Interval . . . . 26 days

30 Minute Archive Interval . . . . 53 days

60 Minute Archive Interval . . . . 106 days

120 Minute Archive Interval . . . . 213 days

Download . . . . Data is automatically uploaded to WeatherLink.com (see below for details).
Using the WeatherLink software, data may be transferred automatically from the data logger to your computer up to once an hour using the Auto Download command. Data can be transferred more frequently, from once a minute to once every two hours, to support Internet uploading and other data sharing features. Only new archive data is transferred during the download.

Data Logger Auto Uploads to WeatherLink.com

Current Conditions Upload Interval . . . . Every 60 seconds

Archive Record Upload Interval . . . . Every 60 minutes

Website Archive Record Storage Capacity . . . . 10240 archive records (4 times the storage capacity of the data logger)

Note: The data logger storage capacity is not affected by the IP upload interval. The data logger still stores the same amount of data for download into the WeatherLink software. If network communication is interrupted and the current conditions and archive records are not being uploaded to Weather-Link.com, the data is still archived on the data logger. When communication is reestablished, all the records not uploaded due to communication loss are automatically uploaded to the website.

WeatherLink.com Specifications

WeatherLink Data Display Options

See WeatherLink.com for updated details of the data display options available.

Package Dimensions

Product #	Package Dimensions (Width x Height x Depth)	Package Weight	UPC Codes
6555	6.00" x 9.00" x 1.63" (152 mm x 229 mm x 42 mm)	9.0 oz. (0.26 kg)	011698 00893 3