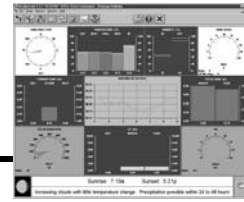


WeatherLink 5.4 for Perception, Wizard & Monitor



7862

Windows Software and Data Logger

WeatherLink 5.4 for Perception, Wizard & Monitor consists of our WeatherLink for Windows software and a data logger that connects to a Perception, Wizard or Monitor console. The software and data logger transfer data from your weather station to a computer, allowing you to create a permanent weather database. Once stored in the database, your weather information may be used to generate a wide variety of reports and graphical displays. You can also share your data via the Internet.

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.
- Compatible with Vantage Pro weather stations. (Note: Only the WeatherLink 5.4 software is compatible. The Perception, Wizard and Monitor data logger cannot be used with Vantage Pro.)
- Built-in HTML support for creating your own weather website and for uploading other files such as web cam images.
- Built-in support for GLOBE, an international weather-related science program for students from elementary through high school. Visit www.globe.gov for more information.
- Built-in support for the Citizen Weather Observer Program (CWOP). Allows CWOP volunteers to send real-time weather data to the National Weather Service. CWOP data used to support weather education and research. Visit www.wxqa.com for more information.
- Built-in support for uploading weather data to the Weather Underground. Makes your weather data easily available to the public. Visit www.wunderground.com for more information.

WeatherLink Data Logger Features

- Archives weather data for subsequent transfer to the computer.
- Manages data communication between the your 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/>).

Specifications

Software System Requirements

Computer running Windows™ 95, 98, ME, NT 4.0, Windows 2000 or XP with at least one free serial port and 5 MB of free disk space. The amount of disk space necessary for the data files depends on the archive interval. Database files containing data stored at a 30-minute archive interval require approximately 36K of disk space per month of data. The file size changes in a linear fashion depending on the archive interval. For example, data stored at a 1-minute interval requires approximately 1 MB/month, while the data stored at a 2-hour interval requires approximately 9K/month. For phone modem connections, the following additional hardware is required: One external modem to connect to the WeatherLink and one internal modem or external modem connected to your computer (modems must be Hayes compatible and run at either 1200 or 2400 baud), and Telephone Modem Adapter (#7870).

Communication Protocol

Data Channel Characteristics 1200 or 2400 baud (switch-selectable), RS-232, half-duplex, data only (no CTS or RTS)
Isolation Ground isolation is provided by photo-couplers in the Link Isolator Kit (available separately).

Data Logger Functions

Control Functions Available Set Archive Interval, Set Calibration Numbers, Set Alarm Thresholds and Time, Clear Total Values, Set Time and Date
Automatic Download Data may be transferred from the WeatherLink to the computer once per hour. Software may be configured to fax last 2 days worth of data immediately following automatic download.
Automatic Clear. Selected highs, lows, and rainfall totals may be automatically cleared at the same time each day.

Data Logger Archived Data

The Data Logger stores up to 1560 archive records (one 21-byte record per archive interval) for later transfer to your computer. The archive records are stored in 32K of memory. Maxima, minima, averages, and totals are taken over the archive interval.

Archive Record Data Inside Temperature (last), Outside Temperature (last), Maximum Air Temperature, Minimum Air Temperature, Wind Direction (dominant), Wind Speed (average), Maximum Wind Speed, Rainfall (total), Inside Humidity (last), Outside Humidity (last), Barometric Pressure (last), Time/Date of Record, Length of Archive Interval

6-4, 7862 WeatherLink 5.4 for Perception, Wizard & Monitor

Computer Products

- Archive Interval User-selectable from the following intervals (in minutes): 1, 5, 10, 15, 30, 60, or 120
- Storage Capacity (the amount of time before the archive is completely filled)
- 1 Minute Archive Interval 1 day
 - 5 Minute Archive Interval 5 days
 - 10 Minute Archive Interval. 10 days
 - 15 Minute Archive Interval. 15 days
 - 30 Minute Archive Interval. 30 days
 - 60 Minute Archive Interval. 60 days
 - 120 Minute Archive Interval. 120 days

Data Display Options

Some of the weather data and reports listed below may not be available from all stations or may require optional sensors.

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

- Graphical Bulletin Displays current conditions, highs and lows, and barometric trend.
- Text-Based Summary Displays current conditions and highs and lows along with the time at which they occurred.
- 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 data may be 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.
- Fuel Demand Estimates fuel usage based on past usage and outside temperatures.
- Sunrise & Sunset Times Calculates sunrise and sunset times for any given latitude, longitude and date.