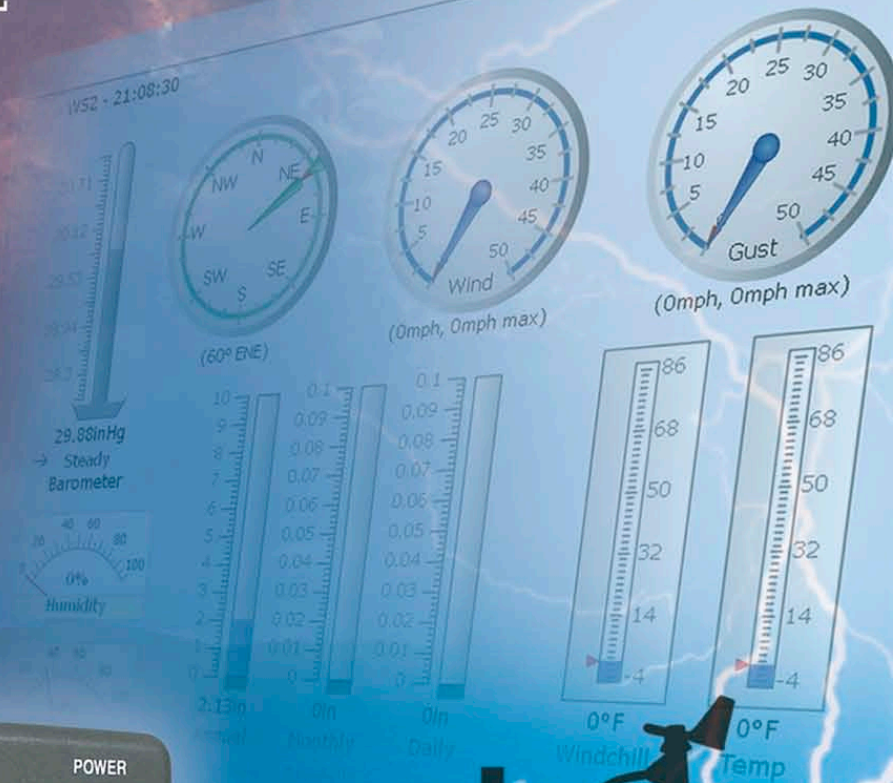


# Weather Wing WS-2



**Get Current Weather Info  
via Internet or Cell Phone  
Anywhere... Anytime...**



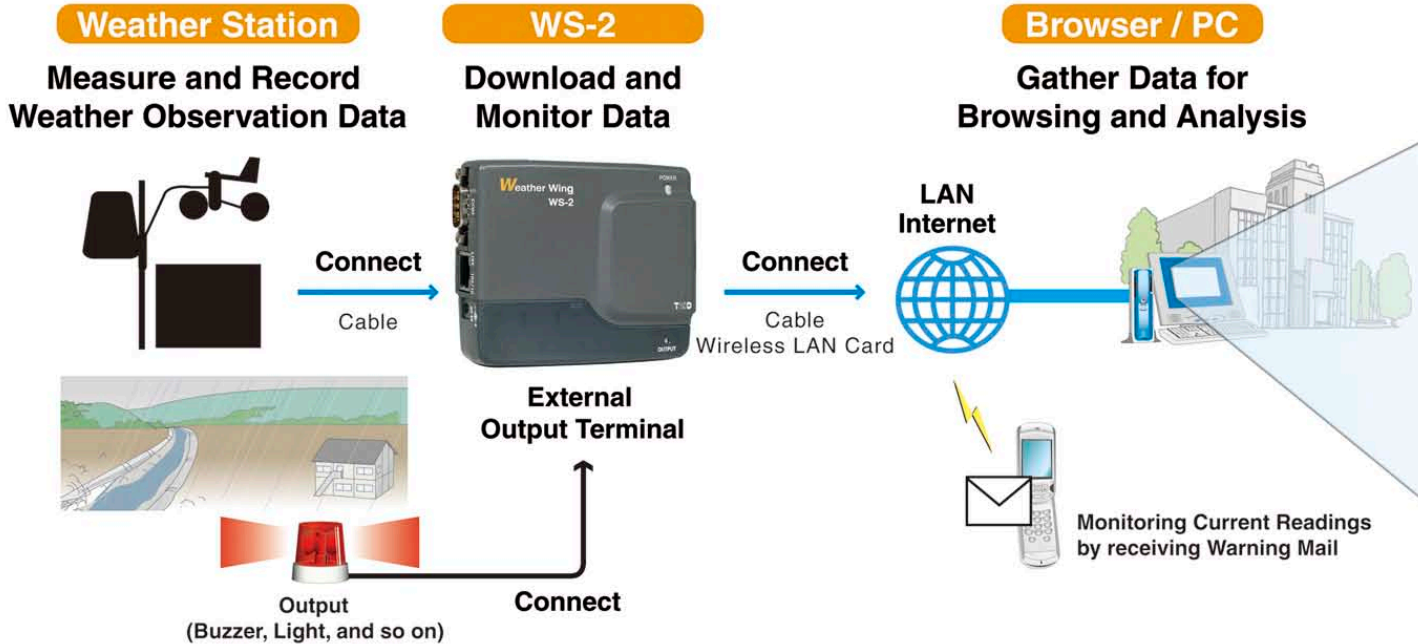
⟨ PAT.P. ⟩

# Weather Wing WS-2

## Weather Station Network Server

WS-2 allows the user to connect to a Weather Station console in order to view weather observation data via Web Browser in real time and in an easy to view visual package.

Possible to send data and warning mails via FTP and/or e-mail without using a computer.



### An Array of Monitoring and Warning Functions

The Warning Monitoring Function built in the WS-2 sends a warning anytime the observation data exceeds the user set Upper or Lower Limit.



**The external output terminal allows the user to easily monitor for warnings.**

By connecting a buzzer or light to the external output terminal it is possible to create a warning system that can be heard or seen on site.

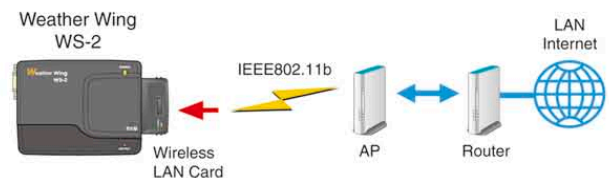


**It is also possible to send warning mails to specified addresses.**

Whenever an Upper or Lower Limit has been exceeded, a warning mail will automatically be sent to the set specified addresses. Hence, the user can be alerted under any circumstance, anywhere, anytime.

### Built-in Wireless LAN Card Slot

This makes communication via LAN possible even in situations where LAN wiring may be inconvenient or impossible.



For details about recommended communication cards and connection devices, please contact your local T&D dealer.

### About Weather Stations compatible with WS-2

#### Vantage PRO2

The Vantage Pro2 weather station from Davis Instruments uses frequency hopping spread spectrum radio to transmit and receive data up to 1000' (300 m) line of sight. The Vantage Pro2 offers features such as forecasting, on-screen graphing, and much more. Quick view icons show the forecast at a glance while a moving ticker-tape display gives more details. The solar powered integrated sensor suite combines a rain collector, temperature and humidity sensors (housed inside a radiation shield), and anemometer into one package.

#### Vantage Pro2 includes:

Vantage Pro2 Console/Receiver  
Integrated Sensor Suite (includes: rain collector, temperature and humidity sensors, anemometer, 40' (12 m) anemometer cable, and solar panel)  
Mounting Hardware

#### Software (sold separately)

WeatherLink™ for Vantage Pro2™, Windows, Serial Port

#### ■ Vantage PRO2™

Davis Instruments Corp.  
<http://www.davisnet.com/>  
E-mail: [sales@davisnet.com](mailto:sales@davisnet.com)



T&D Corporation does not handle or sell "Weather Stations".

Please directly contact the respective companies using the Website addresses listed below.

#### Weather Processing System

The WPS-systems from Texas Instruments can sense wind, temperature, humidity, barometric pressure, rainfall and time, then output that data via a RS-232 interface to other devices. The WPS can be programmed to output current weather along with minimum and maximum conditions for the day. The WPS keeps track of two different minimum and maximum values and up to 8000 lines of data (depending on memory size) in its non-volatile memory clock. The WPS-10 has 2K of memory and will retain approximately 30 lines of data. The WPS-32 has 32K of memory and will retain approximately 2000 lines of data. The WPS-128 has 128K of memory and retains about 8000 lines of data. All functions of the WPS can be controlled through it's RS-232 interface.

#### WPS-systems include:

Wind Direction and Speed Sensor  
Barometric Pressure Sensor  
Temp. & Humidity Sensor in a Pagoda Shield  
Rain Collector  
TWIcal Software & RS-232 Cable  
Non-volatile Data Memory  
100' of Sensor Cable to Junction Box

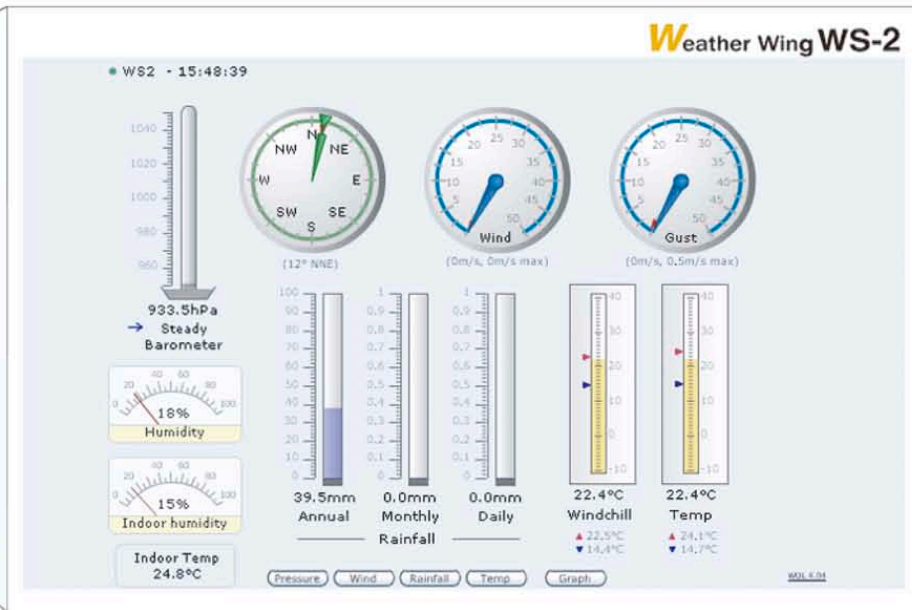
#### ■ Weather Processing System® (WPS series)

Texas Weather Instruments Inc.  
<http://www.twix.com/>  
E-mail: [info@twix.com](mailto:info@twix.com)



# Checking Current Readings and Management via Internet Browser

The built-in WEB server allows the option of putting data on the Internet for public access. In this way, observation data can be gathered from anywhere in the world where Internet is available and current readings can be viewed in real time in an easy to read visual package. It is also possible to make both monitoring settings and e-mail settings for receiving current readings and warning mail via Internet browser.



## Browser Display (Example)

Compatible with Microsoft Internet Explorer (Ver.6.0 or higher) and Fire Fox (Ver.2.0 or higher).

To view in your browser, it is necessary to have Macromedia Flash Player (Version 7 or higher) installed on your computer. The display will differ depending on the type of Weather Station being used.



A function to upload data to Anything Weather.com is built in.

## Management of WS-2

**Properties Settings Window: From the [Warning Settings] Menu**  
Display for making Upper / Lower Limit and Warning Mail settings.

**Weather Wing WS-2**

Settings Menu

Warning Settings

Use Warning  Enable  Disable

Type of Output  Pulse ( 1 sec )  Upon Warning

Warning Items

	Upper Limit	Lower Limit	E-Mail	OUTPUT	Current
Temperature	123 °F	120 °F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Humidity	22 %	21 %	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Barometric Pressure	34 inHg	33 inHg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wind Speed	32 mph		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rainfall	22 in		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E-Mail Headers

To: admin@tandd.local

From: ws2@tandd.local

Subject: Warning Test

Save Settings

**FTP Settings Window: From the [Data Transfer] Menu**  
Display for making settings for Data Transfer via FTP.

**Weather Wing WS-2**

Settings Menu

Warning Settings

FTP Settings

Upload  Enable  Disable

FTP Server Name: ftp.tandd.local

Basic Path Name: CML\*.\*V17

Upload Path: Add Number  None ( a fixed filename )  Sequential Number ( 0000, 0001, ... )  Date ( YYMMDD-HHMM )

Type of Data:  Original  V17

User ID: nakamura

Password: \*\*\*\*\*

Interval: 1 min

Device Configuration

AnythingWeather.com Settings

Upload  Enable  Disable

FTP Server Name: ftp.tandd.local

Upload Path: test.txt

User ID: \*\*\*\*\*

Password: \*\*\*\*\*

Interval: 10 min

Save Settings

## Software Included with WS-2

### WS-2 for Windows

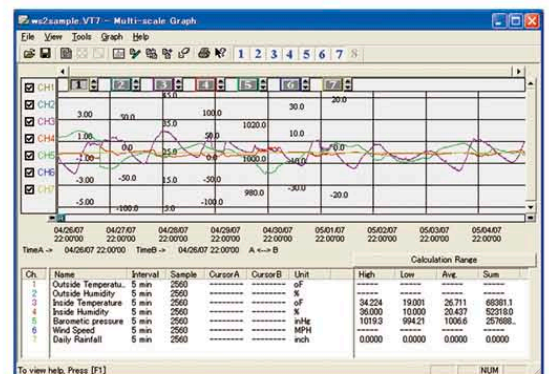
The software, WS-2 for Windows, included with WS-2 is made up of two applications.

#### - WS-2 for Windows

This application helps make network initialization settings which must be made before using the WS-2 to enable a network connection. It allows the user to easily make detailed settings for such items as IP Address and Subnet Mask.

#### - Multi-scale Graph

This application allows the user to view graphs for multiple types of recorded data as well as control printing, saving and editing. This graph tool allows for more detailed graphical data analysis than is available from the simple graph presented when viewing via Internet browser.



## Product Specification

WS-2	
Product Name	Network Server for Weather Station: Weather Wing WS-2
Interface Specifications	Serial RS-232 D-SUB 9 pin Connector LAN IEEE802.3 10Base-T / 100Base-TX CF Possible to use with IEEE802.11b Wireless LAN Card (PRISM2.5 / 3.0) * Although it is possible to be used with either Wireless LAN or 10 / 100 Base-TX, it is impossible to use simultaneously with both.
Communication Speed	19200bps / 9600bps
External Output	Contact Output Capacity: Max AC / DC50V 0.1A
Warning Output	Voltage when OFF: AC / DC less than 50V Current when ON: less than 0.1A ON Resistance: MAX 35Ω
Power	AC Adaptor AD-0605/0609
Dimensions / Weight of Main Unit	H: 83mm x W: 102mm x D: 28mm (Excluding protrusions) / about 35g
Operating Environment	Temperature: 0 ~ 50°C Humidity: 20 to 80%RH (No condensation)
Accessories included in package	AC Adaptor (AD-0605/0609) x1, LAN Cable (LN-20W) x1, Software Set x1, Introductory Guide (Warranty) x1

## Weather Station Live

Management Functions	
Warning Settings	Warning Items (Barometric Pressure / Humidity / Temperature / Rainfall / Wind Speed), Warning Function (Enable / Disable), Upper and Lower Limit Settings (Only upper limit for Wind Speed and Rainfall), Sending E-Mails, Output (Pulse / During Warning), E-Mail Recipient Address
Data Transfer Settings	FTP Upload (FTP Server Name / Upload Path Name / Transmission Interval) E-Mail (Transmission Interval / Attaching Log File / Recipient Address)
Other Functions	Communication Speed, Assigning Device (Station) Name, Refresh Interval Checking Settings (All Basic Network Settings / E-Mail Settings / Wireless LAN / Port Numbers / Communication Port / System Information)

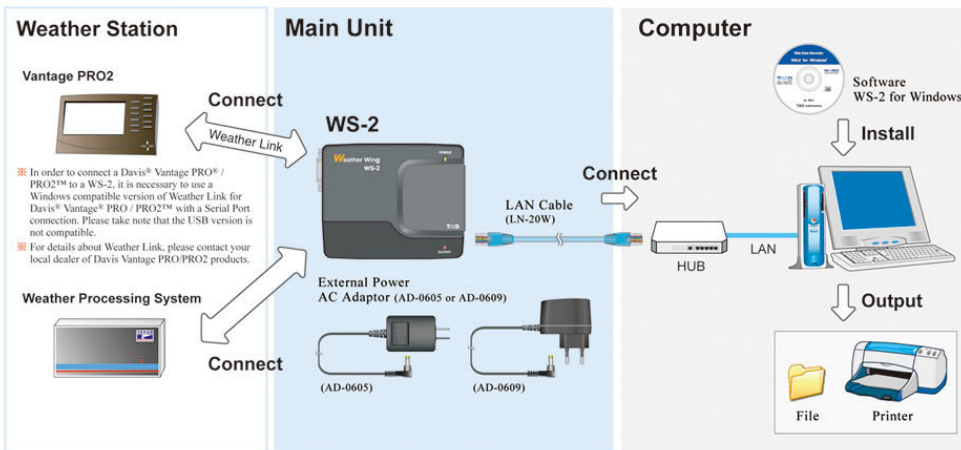
## Software Specification

WS-2 for Windows	
WS-2 Settings Utility	WS-2 Settings Utility, Network Initialization, Detailed Network Settings, Login History (ON / OFF), Clear Login History, Communication Time Settings
Multi-scale Graph	Graph Data Graphs for every Channel (Data allocated to Channels 1 to 7) Zoom in / out and scroll with mouse Data Channel Data Name, Recording Interval, Number of data, Cursor AB position data, Scale / Unit Conversion, Highest / Lowest / Average Reading and Total Number of Readings in Calculation Range Others Data List Display, Delete Data / Re-order Data / Change Display Colors and Width of Data Lines for Channels, Merge Channel Data, View and Hide Channels Set Vertical Axis Display Range, Scale / Unit Conversion, Change Graph Colors and Line Types / Widths, Edit Recording Conditions, Vertical Axis Settings, Creating Text File

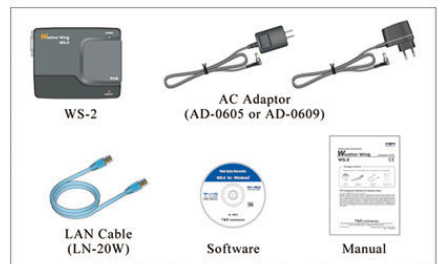
## PC Operating Environment

Compatible OS	Microsoft Windows 2000/XP English * To install the Settings Utility, it is necessary to have Administrator Rights for the computer into which it will be installed.
PC / CPU	A Stable Windows Operating Environment
Memory Capacity	LAN, TCP / IP Communication Possible
Disk Space	Enough memory to stably operate Windows
Monitor	More than 10MB free space (More free space is necessary for data) SVGA (higher than 800 x 600 recommended), more than 256 colors
LAN	100BASE-TX or 10BASE-T / Twisted pair cable conforming to Category 5 (STP / UTP)
Web Browser	Internet Explorer 6 or higher Fire Fox 2.0 or higher

## System Setup



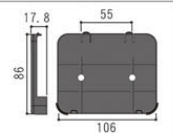
## Contents of package



## Options

### TR-5WK1

**Wall Attachment**  
Materials: Polycarbonate  
Contents:  
Double-sided adhesive tape × 1  
Lock Screw × 2



■ In order to use this product via the Internet or cell phone you must first make necessary arrangements with a provider for a line and obtain a global IP address. In addition, to use the mail function it is necessary to have an SMTP server.

**Caution regarding safety** For safe operation carefully read instructions before using this unit.

Web Site  
T&D Online

Product information, FAQ and software update downloads. <http://www.tandd.com/>

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