

Windwords



An Applied Technologies, Inc. Publication

Volume 3 - Summer 2012

This Issue of Windwords

Welcome to the Summer 2012 issue of 'Windwords'. In this issue you will find the following topics...

Photo Contest Update - We decided to extend the contest to give everyone plenty of time to submit a photo!!!

Updated Ultrasonic Anemometer Electronics - More Features and Functions of the NEW electronics for our Ultrasonic Anemometers along with some of the new options

New Link - Shoemaker Labs, Inc. (Radar and Antenna Design)

Another Link to Visit - Unified Theory of Climate (a shift in understanding the basic cause of atmospheric temperature)

So please take some time and read on, and feel free to pass this information on to your friends and colleagues. Also visit us at Facebook, and please click the "LIKE" button.

Photo Contest Update!

We decided to extend the contest...



Last issue we announced that we were having a contest to find the best photo of an ATI met instrument "in-use". We asked if you had a strange location or gorgeous environment where you are using ATI equipment. If you had taken any inspiring photos from the top of a tower that shows our equipment? We wanted to see what you are doing with our products. The best photo will win a prize!

We realized that some of you didn't get your issue of Windwords as soon as others and didn't have as much time to find a photo to send us, so, we decided to extend the ending date of the contest to 10/26/2012

So if you would still like you dig through your photos and send us a photo of any ATI equipment (any

The New Ultrasonic Anemometer Electronics

New Features, Functions & Commands

All of our Ultrasonic Anemometers now have the new electronics!

We'd like to introduce you to some of the new Features, Functions and Operator Commands available with the new electronics...

Operator Commands For the New Sonic

The software is designed in a menu format, so it can be changed or adjusted by the operator. With the output connected to a computer with a terminal emulator program, the operator can not only see the data directly, as it comes out of the instrument, but the operator can also send commands, everything from turning on/off functions, to changing parameters, from adjusting equations, to changing the speed of the operation.

Some functions available to the operator are;

format, jpg preferred), along with a description of the installation and your contact information, (full name, company, address, email and phone) so that we can let you know if you win. The best photo will receive a FREE UPGRADE to the new sonic electronics board to one (1) of your current ATI 3-axis Ultrasonic Anemometers. (See article in this issue)

All the details are on our website, so please visit us at: www.apptech.com

Prize winner will be notified by email so make sure to provide an email address where you can be contacted.

We'd like to share your picture and story in a future issue of 'Windwords' and with our Facebook friends. We will be featuring your photos on our Facebook page, so please visit us and "Like" our page so you can see the entries. The winning entry will be featured in the next "Windwords".

Send your photos to: photocontest@apptech.com

A New Link to Visit!



We would like to share another link with you. [Shoemaker Labs, Inc.](http://ShoemakerLabs.com) is a designer of radar and radar antennas as well as the Timers we have available on our website. Kevin Shoemaker has a lifetime of experience in Radar and is considered one of the leaders in the industry. He has written a book on Radar Antenna Function and Design, which is available from many locations including Amazon.com.

Another Link to Visit!

For those of you who like to follow the weather discussions.

ATI would like you make you aware of a paradigm shift in understanding the basic cause of atmospheric temperature. Two of our clients have boldly dubbed their new theory the **Unified Theory of Climate**:

They have created a contradiction to the norm. We'll let you read for yourself if you are interested.

Click [HERE](#) if you want to read the poster presentation.

or [HERE](#) if you want a manuscript that's a little easier to read.

- Select the instrument sample rate from minutes to 200 Hz.
- Select from several output baud rates from 4800 to 115200.
- Select between 'Data Averaging' or a 'Median Filter'.
- Select an output mode of 'verbose' or 'terse' with just numbers.
- Select from several different output formats, including 'Binary'.
- Synchronize the instrument operation to an external trigger.
- Provide a syncing output trigger pulse to other instruments.
- Turn on/off other outputs like temperature, and speed of sound.
- Turn on/off a status of the measurements being used.
- Enter an actual RH value for a more accurate temperature reading.
- If options are added, the data from them can be turned on/off.

All commands and functions are listed and explained, in detail, in the operations manual. If anything special is required, consult with the factory.

Instrument Calibration

The calibration of the SATI anemometer is established by its design parameters, and therefore, the instrument can be used as an absolute instrument. The calibration of the instrument requires only one measurement, and this measurement can be performed by the operator. One of the commands, in the software, is a calibration command. This can be performed by the operator any time the operator thinks it might be necessary. The complete description of the calibration operation is in the operations manual.

New Options

Even though the new electronics and software is transparent to the old units, check out the specification sheet on our website, (or request one from sales), you will find some new and better info.

More options will be forthcoming, but here are the first few...

3D Accelerometer

The LV-304 is a level/accelerometer that can be installed in the sonic anemometer.

The static operation can measure gravity and therefore can be used as a level or tilt sensor. In this mode it can provide an output of 'pitch' and 'roll' for the position of the instrument. These data are read in degrees.

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The dynamic operation can measure motion or shock and therefore can be used to monitor any movement of the instrument. In this mode it can provide an output of any movement of the instrument in acceleration of the three orthogonal axes. These data are read in digits that represent gravity.

Data from the accelerometer will be output as fast as whatever rate the sonic anemometer measurement is set to.

No Serial Port on your Computer?

For computers without serial ports - a USB converter is available. Converts Serial data for access via a USB connection on your computer.

Wireless

Wireless connectivity is now available, this will allow you to put the sonic serial data on your network, without cables. Call or e-mail, and ask about it.



Be sure to click the 'LIKE' button!!