



AnaSonde Buzz-E

The AnaSonde™ family of digital radiosondes has been developed as a user-friendly and low cost method for gathering scientific measurements in the lower atmosphere up to altitudes of approximately 30,000 feet. The AnaSonde Buzz-E is a low cost derivative of the AnaSonde-E intended to provide an introduction to the fundamental features and capabilities of the AnaSonde family. The Buzz-E measures temperature only and outputs its data via an LED and a buzzer rather than a radio transmitter.

Technical Details:

The AnaSonde Blink-E and Buzz-E are based on the AnaSonde-E radiosonde and in fact, use an identical circuit board. While the Blink-E and Buzz-E inherently have the full capability of the AnaSonde-E, presently, we only offer the temperature measurement as a standard option, as the goal for these sensors is to provide the simplest and least expensive possible introduction to the world of AnaSondes. Inclusion of other sensors (see optional configurations for the AnaSonde-E) is possible upon request. Alternatively, the SpectraSonde offers a full suite of sensors but does not use a circuit board that matches an AnaSonde. The temperature measurement has a 1° Celsius resolution. The circuit board is 0.825 x 2.5 inches.

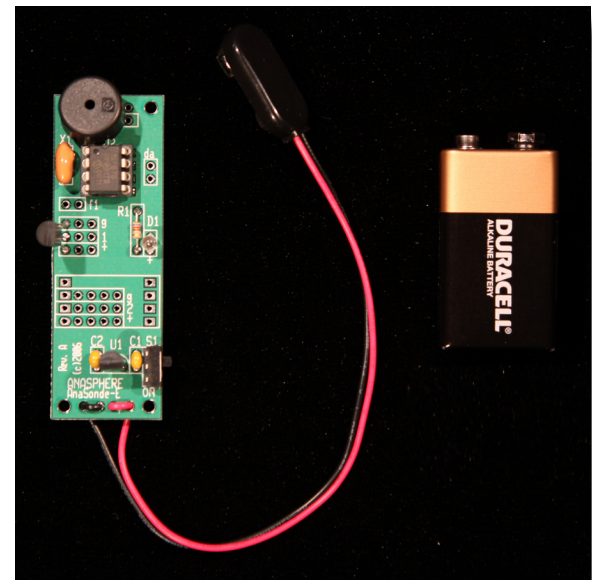
Data Output:

The temperature reading is presented to the user via an on-board LED. The number is presented as a series of blinks. The numbers 1 through 9 are simply presented as the corresponding number of buzzes; a special tone pattern indicated the digit zero and another special blink or pattern indicates a negative sign for temperatures below zero.

This method of data presentation is useful in several ways. First, for those intending to move on to more advanced versions of AnaSondes, this technique provides an introduction to how numbers are presented by audio methods and it is an easy step to go from working with the data from a Blink-E to working with the Morse code transmissions from the more advanced AnaSondes. The Buzz-E is also available with Morse code as an output format. Users who would like both formats are encouraged to look at the SpectraSonde.

Supplied Items:

The AnaSonde Buzz-E is only offered in kit form; it consists of 10 parts plus a circuit board. All you need to add is a 9-volt battery.



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Additional Specifications:**Data Rate:**

A new measurement is made approximately every 6 seconds. Other rates may be available upon request.

User-Provided Materials:

The user will need to provide a 9-volt battery. A soldering iron and solder are required to assemble the kit.

Sensors:

The AnaSonde Blink-E is ordinarily supplied with a single temperature sensor. Special derivatives can carry any combination of two 0-5 volt DC analog-output sensors, the only limit being that only one pressure sensor may be accommodated on the circuit board. The analog channels may also be used with off-board sensors or with resistive sensors (such as CdS photoresistors) in a voltage-divider configuration. The frequency input accepts a 5-volt square wave.

Measurement Precision:

Temperature is reported in 1° Celsius increments. If other sensors are installed each measurement is truncated to the nearest 1° C, 1% RH, 1 mb, 1 mV or 1 Hz.

Comparison to the AnaSonde-E:

The AnaSonde-E may be considered a slightly more advanced version of the AnaSonde Blink-E. The AnaSonde-E has a radio transmitter so that it can radio back measurements taken while it is flying on a balloon. Plus it is also typically equipped with 2 sensors rather than just temperature. The AnaSonde-E operates in the amateur radio bands and therefore requires a user to have an amateur radio license (very easy to get). Also, the transmission format used by the AnaSonde-E is Morse code, as opposed to the simplified code which is an option (along with Morse code) in the Blink-E.

About Anasphere:

Anasphere was founded in 2002 to pursue the development of miniature instruments for atmospheric research. Trace gas sensors and meteorological sensor systems are major areas of company activity. Many of Anasphere's sensors are designed for use on sounding balloons and small UAVs.

Anasphere's customers include the federal government, the private sector and educational institutions. Revenues come from a combination of R & D and instrument sales.