Meet the A2M

Low-Power ALERT2 Encoder

The A2M, from Blue Water Design, is a transmit-only, low-power ALERT2 Intelligent Network Device (IND). Designed for unattended operation at remote gauging sites, the A2M can be powered from a 10W solar panel. Using **Configurable Forward Error Correction** and **250ms TDMA slots**, the A2M makes efficient use of limited radio spectrum.

Proven Reliability

Blue Water Design has enhanced the proven G2012 design, adding new features and several refinements. For example the Console port has been upgraded to a microUSB connector,



and the bulky DB9 connectors have been replaced with much smaller connectors.

Increased Data Throughput

The A2M offers **Configurable Forward Error Correction**, allowing sites to transmit roughly 100% more data in the same amount of time, given a clear radio path. Three FEC settings are available: the original ALERT2 settings, and two new modes designed for sites that have good or great radio paths. The A2X is capable of both transmitting and receiving in any of the new FEC modes.

The A2M can be configured to use **250ms TDMA slots** with the new Configurable Forward Error Correction. Cutting the minimum TDMA slot length in half and increasing the data throughput

allows systems to almost double their capacity or halve their TDMA cycle time and reporting latency.

Decreased Power Consumption

The A2M offers a **15% power usage reduction** over our previous generation product, without sacrificing any functionality.

Additional Features

- Stainless steel, powder coated **case**. Mount flat or on edge.
- Backplane options available, 10.88"x12.75"
- Add a data logger to implement a complete sensing package
- FCC Part 15 Class A Certified
- Selectable modulation output level. Easily configure the A2M to work with a Ritron or Maxon radio, or use the on-board tuning screw for a custom setting.

About ALERT2

ALERT2 is a low-bandwidth, high-reliability data protocol intended for transmission over VHF/UHF radios. It is an open standard published by the National Hydrologic Warning Council (NWHC), and uses a TDMA, a time-slot scheme, to ensure device transmissions do not occur simultaneously. ALERT2 is often used for the collection of hydrological data, but is flexible enough that it may be used for many applications. If you have remote sites that need reliable communications, ALERT2 may be a good solution for you. Contact Blue Water Design for further information.