

ALERT Flood Warning



ALERT (Automated Local Evaluation in Real Time) is a technology for providing and analyzing real-time data where rainfall and river level may present a serious danger to life and property. ALERT specifications are set by the National Weather Service.

Any meteorological event that drops enormous volumes of water in heavy or widespread rainfalls may cause a flood. While some rain is absorbed into the ground, the remaining runs into rivers and streams. This excess stream flow is considered floodwater. Flooding may also be caused by natural dams made of debris and ice or by the failure of man-made dams.

For many communities, monitoring of rainfall and water levels is key for prevention of property damage and loss of life. Flood prone communities throughout the U.S. rely on High Sierra Electronics equipment to warn them of potential or imminent danger. Automated flood warning systems are being used by states, flood control districts, counties and cities in cooperation with the National Weather Service and the Federal Emergency Management Agency.

A typical flood warning system consists of a 10' standpipe tower, ALERT data transmitter, tipping bucket rain gauge top section, an omni-directional antenna and a series of meteorological/hydrological sensors. These automated sensors are placed in or beside rivers and reservoirs throughout a designated area, where data is then collected and sent instantaneously via radio to a base station or personal computer.

The purpose of an automated warning system is to get an appropriate forecast to those potentially effected by the developing flood as soon as possible. This is accomplished by reducing the time needed to gather, process, and analyze data. This extra time can then be used to increase response time and employ emergency evacuation measures.

High Sierra Electronics provides:

- ▶ ALERT Data Transmitters with Standpipe Tower
- ▶ Data Loggers
- ▶ Shelters or Environmental Enclosures
- ▶ Automated Sensors including:
 - Pressure Transducers
 - UltraSonic Level Sensors
 - Bubbler Gauges
 - Incremental Shaft Encoders
 - Tipping Bucket Rain Gauges
- ▶ Batteries, Solar Panels, Cables, Antennas & Mounting Hardware
- ▶ Computerized Flood Forecasting Models

