

Factoid

The world's one minute rainfall record is July 4, 1956, 1.23 inches in Unionville, MD.



HIGH SIERRA ELECTRONICS, INC.
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ADDRESS CORRECTION REQUESTED



Purchasing Made Easy

HSE is pleased to offer Federal buyers the opportunity to purchase our products on GSA Contract Number GS-07F-9563S. GSA Schedule supplies can be ordered in two ways:

1. Directly from HSE
2. Online, using GSA Advantage at https://www.gsadvantage.gov/advantage/main/start_page.do

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SIERRA SUMMIT CHALLENGE

Try answering these questions to confirm your status as a weather geek.

1. What number does 'storm' equate to on the Beaufort Scale of wind force?
 - a) 3
 - b) 10
 - c) 8
2. In the Northern hemisphere an area of low pressure produces what wind direction?
 - a) Counter-clockwise
 - b) Clockwise
3. Okta is a unit of measurement of what?
 - a) Cloud cover
 - b) Temperature interval
 - c) Molecular weight of water
4. The 'Intertropical Convergence Zone', where the trade winds meet near the equator to produce a band of relatively very still air, which can strand sailing ships, is known more prosaically as what?
 - a) The Danger Zone
 - b) The Doldrums
 - c) The Sad Situation

ANSWERS INSIDE

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EXTREME FLOODING Effects of Global Warming



ROAD WEATHER MONITORING City of Grandview, MO

Did You Know?

The world record for the most rainfall in a single day was in 1952 on a small island off the coast of Madagascar called Cilaos La Reunion, according to NOAA. The island received 73.6 inches of rain that day.



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MEET WITH US

We look forward to meeting you April 20-22nd at the ALERT Users Group 2016 Flood Warning Systems Conference at the Tenaya Lodge at Yosemite, CA. As an exhibitor, we will have a selection of ALERT2 equipment on hand for display and demonstration. As a conference participant, we will be presenting technical papers on the SDI-12 Protocol and a customer project involving a remote-access, solar powered camera system.

"The pain of parting is nothing to the joy of meeting again."
-C. Dickens

BOOKMARK US

We have enhanced our website to provide broader information on products and services, which includes our newly designed data sheets. We encourage you to visit and visit often, as we are continually updating our content with application notes, customer feedback, news and events. Make us your latest bookmark at www.highsierraelectronics.com.

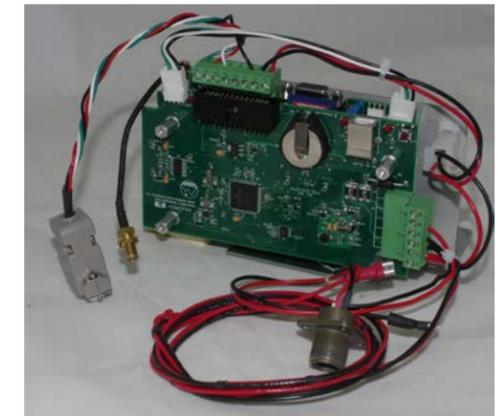


High Sierra Electronics, Inc., 155 Spring Hill Drive, Suite 106, Grass Valley, CA 95945, T: (800) 275-2080 F: (530) 273-2089

NEW PRODUCT RELEASE

We are pleased to announce our newest innovation, an ALERT2 Rain-Only Upgrade Kit. The Model 3324-02 provides a cost effective option for upgrading from ALERT to ALERT2 at sites that only measure rainfall.

- Compatible with HSE Models 3201 & 3206
- Compatible with Model 5096
- Reports Precip, Battery, GPS Status
- Works with Tipping Buckets using 2-wire or 3-Wire Reed Switches
- Includes 16GB Data Logging Memory on Removable SD Card
- Easy to Configure & Install



For more information, visit our website:
<http://www.highsierraelectronics.com/products/496>

or call us at 800-275-2080 for a price quote or to talk about your application.

CUSTOMER INSIGHT

Jason Demers, Monterey County, CA



On 01/19/2016 - As per Jason Demers, Water Resources Technician for the County of Monterey in California: "...The storm system stalled over the coast range adding significantly to our rain totals. We received up to 6 inches in the mountains today (1-19-16) and all of the watersheds started flowing rather suddenly. Since lunch we reached monitor stage on the Big Sur, closed a crossing over the Pajaro, and the Nacimiento jumped up to 6,000 CFS and is still rising. It always amazes me how rapidly things change. Days like this really reinforce the value of ALERT systems."

EXTREME FLOODING

An article was recently published by Tech Times reinforcing the chances of extreme flooding because of global warming. In a new report, a team of experts explained that climate change had "amplified" the violent storms that flooded the UK during late 2013 and early 2014. Man-made greenhouse gas emissions have upped the changes of extreme flooding by 43%, scientists said, as increasingly warmer air temperatures holds more moisture which leads to heavier downpours.

"What was once a 1 in 100-year event in a world without climate change is now 1 in 70-year event," said Oxford University's Friederike Otto, co-author of the report. "We can definitely say with climate change that the issue of flooding isn't going to go away. As a society we need to think hard about the question of our vulnerability and exposure to flooding."

Answers to Sierra Summit Challenge on back page

Answers: B, C, A, B

CUSTOMER APPLICATION

City of Grandview, MO Road Weather Monitoring
By Brad Schaefermeyer, Western Region Sales Manager

In the past, the City of Grand View's Public Works Department had minimal information about the weather conditions near their main street facility. According to Rodney Richards, the City's Engineering Inspector, this particular area has had a history of traffic safety issues relating to slippery or icy pavement. The City wanted to be able to collect and monitor atmospheric and road data information for better management – when to apply winter abrasives or when to warn motorists of dangerous conditions.

Rodney learned about HSE products via our company website and then reached out by phone for more information. He explained his application and then we discussed what sensors and type of communication would work best for the application.

The system consists of a remote station installed on an existing light pole near the roadway. Using the existing infrastructure helped keep down the cost of the project, so that it fit within the City's budget. The measured parameters include our Surface Sentinel, which monitors road surface temperature, air temperature and humidity, and an anemometer and tipping bucket rain gauge. These sensors are connected to our 3512 Controller/Datalogger inside a compact aluminum enclosure. The remote station operates on solar power using a 40 Watt panel mounted on the pole with a 40 Amp hour battery inside the enclosure.

The site communicates via spread spectrum radio to the public works facility where the master station is located. The master station and the remote station are in close proximity to each other and provide full line of site communication. The master station is connected to a dedicated computer running DataWise (DW) Version 10 Software. We recommended DW because it not only collects and visualizes the data, but includes a full suite of database management tools, analysis, and archiving capabilities.

The data is gathered and stored in a standard open source MySQL database and displayed on web pages that can be accessed by any standard web browser. The pages can be viewed through a Local Area Network (LAN) or via the web where they can be accessed from anywhere there is an internet connection.

ROADWAY FLOOD WARNING

Be Prepared



Ironically, many drivers rescued from flood waters report that they were in a hurry to get home, to safety, as the reason for attempting to drive through a flooded roadway. A mere six inches of fast-moving water can knock over an adult. It takes only one foot of rushing water to carry away most vehicles depending on the velocity, which includes pickup trucks and sport utility vehicles.

Advance warning stations advise motorists of a weather-impaired or flooded roadway by activating flashing beacons, message signs, or automatic road barrier gates. A well-designed system can help a region conserve Emergency Management, Rescue and Road Department resources, as well as improve public safety, weather forecasting, and response to flooding events.

HSE offers a complete roadside warning system that can integrate with existing ALERT/IFLOWS flood warning systems. Base station software notifies personnel of events and provides remote control of these advance warning sites for improved traffic safety.

FIELD WORTHY

HSE Technicians have years of training and extensive experience with projects requiring site surveys, radio path analysis, installation, training, and preventative maintenance. They can also perform on-site service, as required, for speedy resolution of aggravating problems, often eliminating the need to return the equipment for factory repair. Meet our Technicians:

Texas Technicians: Chris Chappell (Field Service Supervisor) Derell Redus, Matt Cota, Brendon Drew, Jeremy Kambel, and Rene Mireles

California Technicians: Troy Nofziger (Lead Technician), James Nichols, Maurice Taylor, and Gary Schlussler

PRODUCT ALERT

ALERT2 Demodulator

HSE Model 1002 Series of ALERT2 Demodulators receives ALERT2 messages from remote sensing stations and passes them to a base station computer equipped with an ALERT2 base station software program. Data is exported simultaneously out both a Serial data port and an Ethernet port.



Benefits:

- 'Active' light confirms incoming data is being received.
- Up to 8 receive frequencies (configurable at HSE's factory).
- Micro SD card for logging ALERT2 messages.
- Option to receive 'Legacy' ALERT.
- Desktop or rack mount / compact size, 2U.
- 3-year limited warranty.

Visit HSE's exhibit booth at the ALERT User's Group Conference for a firsthand look and demonstration of the Model 1002 Demodulator. The conference is being held April 19-22 at the Tenaya Lodge, Yosemite. You can also visit www.highsierraelectronics.com to acquire a data sheet. The conference is being held April 19-22 at the Tenaya Lodge, Yosemite. For more info. visit www.highsierraelectronics.com/products/502.

ADVICE FROM THE FIELD

Tip: Maintaining Your Repeater

James Nichols, HSE Technician – Grass Valley, CA

Here are some general guidelines for preventive maintenance at your Repeater site:

1. Check batteries and connections.
2. Check antenna for damage.
3. Check transmission line and connectors to antenna for damage.
4. Check commercial power supply and/or solar panel and connecting cables.
5. Check forward and reflected power.
6. Download and save Repeater Receive log files and configuration files.