



ALERT100, ALERT110, ALERT200, ALERT210

ALERT and ALERT2 Remote Data Platforms

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# Turn-key ALERT and ALERT2 Systems

Fully configurable and programmable

Change of a LEDITALO ansister (Left) and a sustain ALEDITALO

Shown: Standard ALERT210 canister (left) and a custom ALERT210 transmitter (right) designed to customer specifications

## Overview

The ALERT100, ALERT110, ALERT200, and ALERT210 combine our rugged hardware with the ALERT or ALERT2 protocol to allow users to reliably transmit measurement data used by flood warning systems. These systems are contained in a canister that easily fits into an ALERT standpipe. The canister houses a 12 or 24 Ah battery and our AL200 encoder, which is configured for ALERT (ALERT100, ALERT110) or ALERT2 (ALERT200, ALERT210) communications. The ALERT110 and ALERT210 also include a CR800 datalogger, allowing those systems expanded measurement and control capabilities , datalogging, and redundant communications.

#### Measurements

- Precipitation
- Water level
- Temperature
- Relative humidity\*
- Wind speed & direction\*
- Barometric pressure\*
- Snow Depth\*
- Solar Radiation\*

\*optional

The systems can measure a variety of sensors. They have circular connectors on the canister's lid for sensor attachment, and two individual cable entry seals for routing sensor or communication cables. Data is transmitted over a licensed radio using the ALERT or ALERT2 protocol.

Campbell Scientific's modular line of communications and sensor products allows the new systems to be adapted for custom applications. They can be drop-in replacements for existing stations or turnkey solutions for new installations.

### **Benefits and Features**

- > Upgrade from ALERT to ALERT2 with a free, simple operating system (OS) change
- ALERT-style canister that fits in standpipes and can be used as a drop in replacement for existing stations
- Modular mounting of components for easier field servicing
- Easily configurable with graphical, point-and-click software
- > Sealed circular sensor connectors on lid of canister
- > Event and schedule driven reports including battery, GPS-sync status, tipping bucket, voltage, current, SDI-12, high/low state
- Exceptional hardware quality, manufactured at Campbell Scientific by Campbell Scientific



# Components

- ALERT canister enclosure
- 2 ALERT/ALERT2 encoder
- 3 VHF/UHF radio
- 4 12 Ah or 24 Ah battery
- 5 Datalogger (optional keypad)
- 6 Transmit antenna connector
- 7 Circular sensor connectors
- 8 Ground lug
- 9 Cable entry seals
- 10 Power connector
- 11 GPS antenna connector

# **Customizations**

These ALERT systems allow user-defined customization. Please talk to our application engineers for details.

#### Sensors

The ALERT100 and ALERT200 can measure pulse (tipping bucket), voltage, SDI-12, and 4 to 20 mA sensors. The ALERT110 and ALERT210 can also make digital I/O, low-level ac, and bridge measurements for complete weather station including wind speed and direction, temperature and relative humidity, solar radiation, and barometric pressure. Sensors commonly used with these ALERT systems include:

- > TB4 and CS700 Tipping Bucket Rain Gages
- CS451 and CS456 Pressure Transducers
- CS410 Shaft Encoder
- CS470 and CS471 Compact Bubblers
- CS475, CS476, and CS477 Radar Sensors
- > OBS3+ and OBS300 Turbidity Probes
- > 107 or 108 Temperature Sensors
- HMP60, HC2S3, CS215, or HMP155A temperature and relative humidity sensor
- CS100 Barometric Pressure Sensor
- > 034B Wind Speed and Direction Sensor

## **Software**

All systems are compatible with third party ALERT and ALERT2 software. Devices are configured using Campbell Scientific software including Device Configuration Utility and LoggerNet. Remote and

# **Specifications**

- Dimensions: 21.6 x 20.3 x 57.2 cm (8.5 x 8.5 x 22.5 in)
- Weight without battery: 5.2 kg (11.5 lb)



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These ALERT systems include an AL200 and a 5 W Maxon radio for transmitting data using the ALERT or ALERT2 protocol. Other communication devices that can be used with these systems include: RavenXTV or RV50 Cellular Modem RF451 or RF407 900 MHz spread-spectrum radio typically used for wireless sensors or flasher control

> Satellite transmitters

> Operating Temperature: -40° to +60°C

> Supply Voltage: 9.6 to 16 Vdc

Above shows a general component depiction. Actual components used depend on model ordered.

#### Communications

long range, on demand two-way communications is also possible

using LoggerNet and one our many other communication devices.