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WHEN MEASUREMENTS MATTER

AL205B
ALERT2 Base

ALERT2 Base Station

Robust, flexible, and configured to receive messages

Overview

The AL205B is an ALERT2 receiver that is configured to support receiving ALERT2 messages typically used at base stations.

The AL205B is configured with a radio receiver. Three serial ports allow for input and output to several devices including a data logger, PC, and serial media converters. Local and remote data collection and administration are possible through the micro USB console and Ethernet ports, with Ethernet being a highly convenient method for transmitting received data over local or wide-area IP networks. The USB host port supports flash drives and peripherals to load settings and firmware, as well as transfer log files from the SD flash drive. Either the GPS or NTP functionality can be used to provide time synchronization, and LEDs offer status and activity indicators.

This ALERT2 Base is suitable for remote, unattended deployments. A co-located data logger can provide local meteorological measurements such as rain, wind, and barometric pressure; provide status information such as battery voltage and intrusion detection; and serve as a communication medium and/or protocol converter for links such as satellite, cellular, and SCADA.

The AL205B supports configurable forward-error-correction (FEC), allowing for the use of 250 ms TDMA time slotting for faster TDMA cycle times and larger networks. The AL205B is firmware-upgradeable, giving you the ability to take advantage of features such as ALERT2 two-way and encryption.

Note: ALERT2 is a trademark of the National Hydrologic Warning Council.

Benefits and Features

❯ TCIP/IP streaming of received ALERT2 messages and error messages in binary or ASCII format

❯ Storage of received ALERT2 messages and error messages via a microSD card

❯ Ability to download logs and data in a secure manner via SFTP over a TCP/IP network

❯ ALERT2 network device status reporting (battery voltage, temperature, error flags, GPS clock status, and message statistics)

❯ Remote reconfiguration of device via secure TCP/IP connection

For comprehensive details, visit: **www.campbellsci.com/al205b**

Specifications

Operating Temperature Range	-40° to +80°C
Power Connector	2 pin, screw terminal
Power Supply	9 to 17 Vdc (reverse polarity protected)
Current Drain at 12 Vdc	❱ ~20 mA (GPS on) ❱ 96 mA (normal operation, no external connections) ❱ ~1 mA (each serial port) ❱ ~25 mA (Ethernet port) ❱ 144 mA (all serial ports, USB console, and Ethernet connected, GPS on)
RX Radio - Data Out Level	300 to 1200 mV (peak to peak)
TX Radio - Data In Level	100 to 1200 mV (peak to peak, configurable in 0.5 dB steps)
Clock Synchronization	GPS or NTP
Clock Drift	❱ 3.5 ppm (-40 to +80°C) ❱ 2 ppm (0 to 40°C)
RS-232	❱ 1200 to 115,200 bps
	❱ 3 ports ❱ Custom 3-pin cable
Ethernet	10/100 Mb (fixed or DHCP addresses)
Storage	microSD expandable storage to record all ALERT2 traffic in ASCII format (N, P, S, C message)
LEDs	10 status LEDs for Power, Bit Sync, Frame Sync, GPS On, Clock Sync, TX Radio Power, Transmit, Serial 1, Serial 2, Serial 3
Active GPS Antenna	SMA, female
RX Radio	4 pin, spring clip (power, gnd, data, channel select)
TX Radio	5 pin, spring clip (power, gnd, ptt, data, channel select)
Certifications	FCC Part 15 Class A certified
Dimensions	19.05 x 10.16 x 3.18 cm (7.5 x 4 x 1.25 in.)
Weight	600 g (1.3 lb)