



## Blue Water Design LLC

# Model B2010LP ALERT2 Base Station— Demodulator & Decoder



### Description

The B2010LP is a low power, high performance rack mounted receiver, demodulator and decoder an ALERT2 network. It is designed for unattended remote operations using reliable operating systems and hardware. The B2010LP's output data streams are highly configurable and provides TCP/IP data streaming and remote access. The B2010LP meets the NHWC ALERT2 AirLink v1.1, MANT v1.1 and API v1.0 Protocol Output specifications. (Refer to software release notes for specifics regarding supported API output format configurations.)

### ALERT2 Receiver - Demodulation – Decoding features

- Integral Ritron DTX-145 VHF or DTX-445 UHF transceiver for receiving; radio channel switch selectable (under the top cover); and external Ritron programming connector.
- High performance Digital Signal Processor ALERT2 demodulation and Forward Error Correction decoding.
- Configurable TCP/IP streaming of received ALERT2 messages and error messages; configurable for multiple client connections; multiple server connections supported.
- TCP/IP data connections are individually configurable as either ASCII or binary ALERT2 API output.
- RS232 serial port streaming of received ALERT2 messages and error messages; configurable serial port parameters.
- microSD card stores all decoded ALERT2 messages and error messages.
- remote access via TCP/IP (SSH & SCP) to logged data and decoder configuration.
- RS232 serial ASCII console port for configuration of the decoder.
- Front panel LED display indicating ALERT2 message “Bit Synchronization” and “Frame Synchronization” and “Power” (heartbeat).
- Optional external receiving radio connection.

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### Connections/Interfaces (rear panel)

Label	Connector	Notes
Power	2 pin 3.81 mm header	DC, 12.0 Volts nominal
GPS	NOT USED	
TX RF	NOT USED	
RX RF	BNC, female	RF input, VHF/UHF Receiver transceiver, 50 ohm
RX DTX Prg	DB25, female	I/O for Ritron DTX programming cable; R2011 must be powered, RX transceiver must be Ritron Inc.
Decoder, Serial Out	DB9, female	RS232, DCE, ALERT2 decoder serial output; serial parameter set in decoder configuration, 19200 baud, 8N1 (typically)
Decoder, Console	DB9, male	RS232, DTE, ALERT2 decoder serial console input/output; 115200 baud, 8N1 (typically)
Ethernet 0	RJ45	Ethernet IP connector, 10/100, (TCP, UDP, DHCP, NTP, SSH, etc.)
Ethernet 1	NOT USED	
Encoder, Serial in	NOT USED	
Encoder, Console	NOT USED	

Specifications					
	Min	Typical	Max		Notes
Power Supply	9		17	Volts DC	Not Reverse Polarity Protected
Power		1.5		Watts	receiving
Temperature Range	-10		60	deg C	operating (specifications)
Size	2U high 19" rack				
	17" (W) x 13" (D) x 3.5" (H)			inches	cabinet size (w/o side flanges)
		0.75" (D)		inches	max connector protrusion, rear panel
		0.125" (D)		inches	max (LEDs) protrusion, front panel
	1" (W) x 3.5" (H)			inches	rack mount side flanges
Weight		8.0		pounds	

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Specifications subject to change .