Troll’s ABLE is a bidirectional transceiver system that interfaces transmitters, amplifiers, receivers, filters, GPS antenna, the IMU and tracking antennas onboard an aircraft.

Designed to support spatial diversity airborne antenna systems, ABLE evaluates all of the receive and transmit signals on-board the aircraft in order to manage inputs and outputs to improve reception. The ABLE routes transmission through one or more power amplifiers to all the bidirectional antennas mounted to the aircraft’s fuselage. Their location is determined so one or more aircraft mounted antennas does not lose line-of-sight (LOS) with ground-stations. This combination of intelligent signal processing, switching precision and spatial diversity, enables Troll to flawlessly deliver uninterrupted, long-range IP video and data to 150nm.

With simultaneous transmit and receive paths connected to all the tracking antennas, ABLE continuously evaluates receive signals from each antenna in order to send only the best signal to the receiver.
ABLE
Data Link Antenna Controller

PHYSICAL CHARACTERISTICS
Size: 19” 3U
Weight: 28 pounds
Input Voltage: 120/240 VAC - 28 VDC
Input Current: 1 A nominal, 24 A max with external loads
Output Voltages: 4 X 28 VDC (up to 7 A each or 20 A total), 3 X 12 VDC (9 A total)
Video Display: Backlit TFT LCD, 320 X 240 pixels with 64,000 colors
Operating System: Windows
Program Storage: Type 1 Compact Flash
Data Ports: Multiple HD/SD/DVI/ Composite/ASI/Ethernet and Serial
2 Ethernet 10/100
2 USB

FEATURES
Data and Video Processor: Highly configurable data and video processor - encodes, decodes, transcodes, encrypts and provides a control interface for bidirectional airborne or ground data link antennas and transmitters
Input Controls: System controlled via touchscreen or USB keyboard can be used for data entry.
BIT (Built In Test): Comprehensive internal testing including monitoring input/output voltages and currents, internal temperature and serial port status, settings and error rates.

OPTIONS
GPS: Built in 16-Channel GPS. Drivers available for external GPS (Consult factory).
Compass System: Analog ARINC-407 compass input available.
Tracking Data: Internal tracking data encoder RS-232 or audio output available. Supports NavTrack, LogicTrack I and II. (Other protocols, consult factory).
Video Input: Supports two HD/SD/Composite inputs (live video) and ASI
Video Output: ASI Output/ 2 DVI / HDSDI

TOUCHSCREEN SOFTWARE INTERFACE

Specifications subject to change without notice.

Visit us at our website for product and corporate information sessions. See video imagery of this system.
www.TROLLSYSTEMS.com