

AerIDM Summary

The AerIDM is a rugged, small, lightweight, power-efficient Improved Data Modem. Aeronix developed the AerIDM to provide customers the first standalone airborne/vehicular modem based on WinIDM socket-based host architecture. It is designed to meet environmental standards for both avionics and ruggedized vehicular installations. It can also serve as a Software Integration Lab asset as it integrates with U.S. DACAS DVMT and the Aeronix Protocol Analyzer.

The AerIDM supports two fully-independent radio channels, so only one modem is required to provide multiple data link solutions.

The AerIDM core executes Aeronix' WinIDM dual-channel software modem for its VMF/AFAPD/TACFIRE/MTS waveform solutions. For VMF networks, WinIDM also implements XNPv2 and MIL-STD-2045-47001 Segmentation/Reassembly. Alternatively, AerIDM can serve as a Sync-Serial interface to a CNR allowing other waveforms to be utilized.

AerIDM Technical Notes

Features

- ◆ Ruggedized design for ground/airborne vehicular installations
- ◆ Attractive SWaP
2.3"H x 5.75"W x 4.7"D
< 1 lb. 10 oz.
1.5W typical (1.8W maximum)
- ◆ 28VDC Input
- ◆ Full "WinIDM" solution with identical socket-based API
- ◆ Qualification Standards: 704A, 810G, 461F

Modular Host/Radio Connectors:

- ◆ Each channel of the AerIDM features a ruggedized, modular 38999 connector to provide the flexibility needed to allow a single modem to interface to a wide variety of radios
- ◆ Modular Radio Connectors can be made available for any currently fielded synchronous data port radio
- ◆ 1 Ethernet Port, 1 Power Port, and 2 Radio Ports

Protocol Analyzer Compatible: The AerIDM can be networked to a laptop operating the Aeronix Protocol Analyzer to test your MIL-STD-188-220 interoperability.



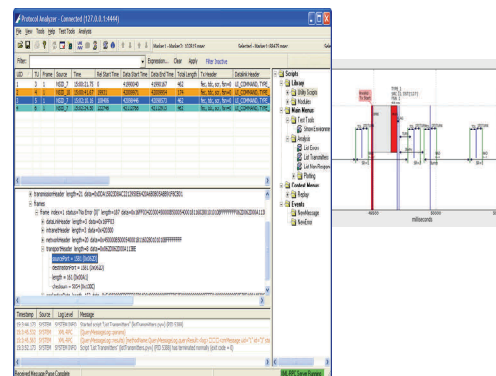
Aeronix Overview

Aeronix has been involved in the IDM tactical data link business area since 2001. Aeronix is a multi-faceted contributor to the U.S. Digitally-Aided Close Air Support (DACAS) community. Aeronix modem technology is deployed on multiple airframes, including the F-35, A-10, B-52, F-16, and multiple ground platforms, including BAO-Kit. Besides providing modem hardware/software equipment, Aeronix actively serves on the Combat Net Radio Working Group and leads/participates on multiple ECPs of the DACAS Coordinated Implementation movement. Aeronix has developed the XNPv2 C++ Common Software Module (CSM) available through the U.S. government for all modem suppliers. Aeronix' WinIDM and Protocol Analyzer are core components of the DVMT DACAS test tool used at Boldquest and DACAS test labs.



Related Technologies: Protocol Analyzer

The Aeronix Protocol Analyzer provides the capability to fully decode any captured VMF TDL message traffic. The decoded data displays a summary of every over-the-air transmission, as well as a detailed decoding of the received data, down to the bit-level. All transmissions are logged with a timestamp that records the transmission time with millisecond accuracy. Annotations can be made to the recorded data to comment on the message traffic. Recorded data, with the comments, is exportable to both XML and HTML formats.



AerIDM Key Features

- Ethernet Host Interface
- Full Linux OS
- Dual, Independent Radio Interface Channels
- 38999 Connectors
- CESMO-Compatible
- DACAS Block 1 Compatible
- XNPv2
- Segmentation/Reassembly
- DVMT Compatible
- Field Reprogrammable