



Rugged Logic - Axiom Air: Ultra-compact DVB-S2X Modem Manager for Aircraft Applications

Chantilly, VA - March 16, 2022 – [Rugged Logic](#) is announcing the release of the [AXIOM AIR](#), an ultra-compact DVB-S2X aircraft modem manager. The product will provide aircraft SATCOM terminal integrators with a compact and low power DVB-S2X modem. It includes embedded processing for intelligent location-based applications, and a complete set of interfaces for aircraft and antenna systems. The AXIOM AIR will be at the SATELLITE 2022 show in Washington, D.C. on March 21-23, 2022 at the Teledyne Defense Electronics booth 1234.

At the core of the AXIOM AIR is the Teledyne Paradise Datacom [AXIOM-X](#) modem. This compact, yet powerful, DVB-S2X modem provides broadband connectivity while being extremely bandwidth efficient. Additionally, the compatibility of the AXIOM-X with other Paradise modems gives users the ability to extend their networks into new and smaller aircraft. It is capable of supporting data rates on the transmit side of up to 345 Mbps and on the receive side of up to 230 Mbps.

Adding to the capability of the AXIOM AIR is a complete set of interfaces to make integration with multiple types of aircraft and antenna systems possible. The core platform is built to be adaptable to ARINC 781 or 791/792 applications but can be modified to meet custom requirements. This includes interfaces for OpenAMIP, ARINC 429 for antenna control or IMU data, GNSS interfaces, and optional RSSI for closed loop antenna pointing.



An advanced sealed chassis design allows the system to operate in more severe environments than typical aircraft modems. Coupled with an electronics design to protect against lightning and prevent EMI/EMC issues, the AXIOM AIR exceeds DO-160 recommendations for ARINC 791 modem managers. Integrators can feel secure in reliable operations in all kinds of environments. This fully capable system has been optimized for size, weight, and power. The 1/4 ATR chassis is compatible with ARINC trays and measures 384 x 200 x 61.7 mm, weighs 3.5 kg, and has a typical power consumption of 35W.

Please contact sales@ruggedlogic.com for additional information.

About Rugged Logic

Rugged Logic specializes in the design and manufacturing of communication and power products for remote use in environmentally harsh conditions, such as aircraft, maritime, and mobile applications. Our designs are innovative and highly reliable to consistently meet the mission requirements of our customers. Our services support the custom needs of our clients through product design, engineering analysis, and software design. Learn more at ruggedlogic.com.