Miniature Common Data Link Transitioned

The Miniature Common Data Link (Mini-CDL) is a small, lightweight, low power, low cost CDL system for use on small RPAs (Remotely Piloted Vehicles) for dissemination of ISR data.

Mini CDL provides range of data rates up to 45 Mbps in an approximately 2.5 pound, 25 in3 package. Key technology enablers include high speed Field Programmable Gate Arrays (FPGAs), small NSA approved Type I encryption chips, high efficiency solid state power amplifiers, and miniaturized diplexer components.

Benefits to the warfighter include small, low-cost CDL technology for ISR data transfer, and dual source development reduces end cost to user; low Size, Weight, and Power (SWaP) enables use on 35 lb+ class of RPAs; interoperable with deployed CDL ground systems such as One System Remote Video Terminal (OSRVT), ROVER III/IV/V, Team Portable, and Video Scout; interoperable with legacy CDL airborne systems such as MR-TCDL, Mini-TCDL, and Hawklink.

During 2011, Mini-CDL, with a Technical Readiness Level (TRL) of 7, transitioned to the Air Force Electronic Systems Center (ESC) CDL Program Office. Customers include Army PM-Unmanned Aircraft System (UAS) RQ-7B Shadow Program and Naval Air Systems Command (NAVAIR) MQ-8B Fire Scout Program.

For additional information on this technology contact AFRL/RI techinfo.if@rl.af.mil, (315) 330-2143.
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