

Miniaturized Cross Domain Solution

Users have expressed a growing need for a small form-factor, rugged, one-way data transfer product, that will withstand a wide range of tactical operating conditions, including provision to the individual, dismounted, warfighter. Owl has migrated its proprietary DualDiode® technology to such a platform, to deliver a reliable, cost-effective product with adequate bandwidth and speed for tactical, fully portable, deployment.

The Owl Solution

The MCDS product line was developed to provide the robust capabilities of Owl's Cross Domain Solutions in a miniaturized form factor. With the full capability to isolate networks, transfer data and connect Unclassified networks to Secret networks, the miniaturized solutions are designed to satisfy the requirements of highly mobile, tactical missions. Their small size, weight and power (SWaP) profile make them perfect for dismounted soldiers, embedded vehicle computers or any other environments where size and weight considerations are critical.

Due to the broad acceptance of Android devices, with their potential value in field-forward scenarios, Owl has responded with support for handhelds and tablets running various versions of the Android™ platform operating system. Tailored from Owl's accredited full-sized CDS solutions, our game-changing mobile solutions are readily deployable. Our USB-DualDiode technology permits the direct connection of mobile devices (laptops, tablets, smartphones) to highly sensitive networks. And with solutions the "size of a quarter", the Owl MCDS is the most portable CDS on the market.



Technology Available Today

The Owl MCDS one-way USB technology is fully functional today, with channel capacity of approximately 2Mbps. Power consumption is very low. The form factor shown may be significantly reduced in high-volume quantities for added security. Data filters and device identification signatures may be enabled on the device.



What is DualDiode® Technology?

DualDiode® products from Owl are engineered to segment and isolate networks that simply cannot afford to be compromised. This patented hardware design allows data to only flow in one direction. Utilizing a true protocol break, the DualDiode conceals all IP and MAC address information and prevents unwanted network probes. The modular simplicity of DualDiode products, their bandwidth capacities – and the range of user data/information types they support – provide integration and scaling flexibility while maintaining the highest levels of network security.

Ruggedized Warfighter Cross-Domain

This instance of the Owl MCDS device has been designed with standard USB interfaces – a Send-only USB device and a Receive-only USB device, physically isolated from each other by an integrated opto-coupler. Send and Receive sides of MCDS are configured to connect only to devices enumerated as valid source and destination. Incorrect setup cannot be made operable. Owl USB-DualDiode technology permits the direct connection to sensitive networks of mobile devices, such as laptops and PDAs. Also, Owl MCDS is useful in securely porting field devices to embedded on-board computers in vehicles, or in other dynamic environments.

These easy-to-establish connections permit one-way data transfer from the mobile, or embedded device, to a high confidentiality network; or one-way transfer of data from a high-integrity data source network to the mobile, or embedded device. From low to high, one-way security policy absolutely assures the confidentiality of the high security domain. From high to low, one-way security policy prevents penetration of the high-security domain, assuring that data transfer can only be initiated from the high side.

🔍 Support for Smartphones and Tablets, Bring-Your-Own-Device (BYOD)

Support for Smartphones and Tablets, Bring-Your-Own-Device (BYOD) Tactical environment product developers are adopting the latest trends in social communications. Due to the broad acceptance of Android devices, with their potential value in field-forward scenarios, Owl has responded with MCDS support for handhelds and tablets running various versions of the Android™ platform operating system. First, the Android "honeycomb" OS for tablet-to-tablet one-way transfer, and the Android "ice cream sandwich" version for transfers smartphone-to-tablet.



🦉 About Owl

For over 16 years Owl Computing Technologies has been implementing next generation cybersecurity solutions for critical networks. Owl's DualDiode Technology®, a proprietary data diode, boasts 24 technology patents and has over 2,000 successful deployments globally across intelligence, government, military, utility, energy, and other critical infrastructure networks. Owl's hardware-enforced technology ensures secure networks and enables the reliable and robust transfer of all data types and file sizes.