**Owl Cyber Defense Solutions, LLC (Owl) leads the world in data diode and cross-domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs—from entry level to enterprise. Our cybersecurity specialists are intimately familiar with a wide variety of industry pain points, technologies, and best practices, and have helped hundreds of organizations around the world secure their networks with Owl’s patented hardware-enforced, unhackable data diode solutions.**

**Owl’s mission is to create market-leading cybersecurity products that help organizations large and small around the world to secure their sensitive networks and assets from cyber threats and data loss. The Owl team are thought leaders in their respective fields and technical pioneers with a culture of innovation and a goal of excellence in everything that they do. From advising and assisting organizations in securing their systems and digital devices to developing cutting-edge data diode technology, Owl is building the future of the network security industry.**

**The Owl product line is built on over 30 granted technology patents with still more pending. Owl was the first to commercialize data diode technology, the first to develop a powerful server-based, two-card solution, the first to create an all-in-one 1U appliance solution, and the first to develop a compact DIN rail-mountable solution, hardened for use in critical infrastructure environments. Future solutions in development include further miniaturized solutions, specialized mobile/tactical enclosures, and more.**
**WHAT IS A DATA DIODE?**

A data diode is a one-way communication device that enables the safe transfer of data between networks, and by its one-way nature provides unhackable network segmentation and security. Beyond the physical hardware that maintains a physical and electrical separation of source and destination networks, Owl intelligent data diodes include sophisticated software designed to increase security, provide unmatched connectivity and compatibility, and facilitate seamless one-way communication in a two-way world.

Intelligent data diodes effectively eliminate external points of entry to the sending system, preventing intruders and contagious elements from infiltrating the network. Securing a network’s entire data outflow with data diodes makes it impossible for an untrusted network or threat actor to pass along malware, access your system, or make harmful changes.

Owl data diodes allow organizations to send data in real time to information management systems in financial, industrial, and government applications without compromising the security of their networks. Every day, data diodes protect some of the world’s most valuable information and network infrastructure from theft, destruction, tampering, and human error, mitigating the potential loss of millions of dollars and countless hours of work.

**How Owl Data Diodes Work**

Unlike software-based firewalls, Owl data diodes are enforced by a hardware mechanism. An LED transmits data on the source side of the data diode, and a photo receiver collects it on the destination side. Two-way communication continues seamlessly with the source and destination networks on each side of the data diode through built-in proxy computers. Data physically cannot be sent from the receiver back to the LED, securing the source network from external access.

**CAPABILITIES & USE CASES**

- **One-Way Out**
- **One-Way In**
- **Two-Way**

- **FILE & DIRECTORY TRANSFER**
- **REAL-TIME DATA STREAMING**
- **DATABASE REPLICATION**
- **SIEM & REMOTE MONITORING**
- **SOFTWARE UPDATE & PATCHING**
Owl Accreditations

As a provider of cybersecurity products for highly critical environments, Owl understands and implements stringent processes for developing, delivering, and supporting products. Owl products meet a number of standards for quality, performance, interoperability, and security including:

- ISO 9001:2015 Certified
- NCDSMO Baseline Products
- NATO Approved Products
- US DHS SAFETY Act Designation
- Common Criteria EAL Certified
- NIST SP800-82
- API Standard 1164
- ChemITC
- AWWA G440-09
- ISA/IEC 62443
- NRC 5.71
- NERC CIP 002-009
- GISEC
- TUV Safety Testing

Securing the World

Owl operates globally, both directly and through trusted partners. Leveraging the local expertise and knowledge of extensively trained regional partners, Owl is able to maintain timely service for exceptional customer satisfaction and success worldwide. Owl now features seven regional Master Distributor partners, as well as a large number of technical partners with which the company has developed new interfaces and cross-compatible products.
Why Owl Data Diode Security is Better than Firewalls

There is really no debate over whether data diodes are more secure than software firewalls – they are. Owl data diodes are physically enforced with a hardware-based security mechanism and provide 100% confidentiality and segmentation between networks. They are also not vulnerable to the software bugs, zero-day exploits, or misconfiguration that plague firewall solutions.

The question has been whether data diodes can meet all of the same sophisticated communication capabilities which have made firewalls the traditional network security solution. Owl has invested decades of engineering and intelligent design into the communication facilitation software layer built on top of its patented hardware platform. This sophisticated layer of connectivity, compatibility, and functionality is really what sets Owl data diodes above other unidirectional networking products and finally provides a solution that has both far superior security compared to firewalls, and comparable communication capabilities.

### OWL DATA DIODE PRODUCTS

**COMMERCIAL/INDUSTRIAL**
- Owl Perimeter Defense Solution
  - OPDS-5D
  - OPDS-100D
  - OPDS-100
  - OPDS-1000
  - Owl DiOTa

**SPECIALIZED PRODUCTS**
- Owl Secure Software Update Solution (SSUS)
  - One-Way with Filtering
- Owl ReCon
  - Two-Way Communication

**GOVERNMENT/DoD**
- Owl Cross Domain Solution
  - Multi-Purpose (MPP)
  - Streaming (ST06)
  - File Transfer (FT15)
  - Cloud to Cloud (C2C)
  - Mobile/Tactical (SCOWT)