UPTS
DATA TRANSFER APPLICATION

OWL
CYBER DEFENSE

🔒 UDP PACKET TRANSFER SYSTEM (UPTS)

UPTS enables secure, reliable, fast, one-way datagram-based information transfer. In conjunction with Owl DualDiode Communication Cards (including Owl 10G v7 sets) and related software drivers, UPTS securely transfers UDP-formatted traffic unidirectionally between discrete networks, in certified and accredited cross-domain solutions. UPTS transfers data, such as streaming video and image instances, by means of an asynchronous one-way protocol proxy that provides UDP application-level sessions across the DualDiode one-way communication.

THE 🦉WL SOLUTION

UDP Packet Transfer System (UPTS) allows the transfer of UDP data streams. This One-Way Data Transfer application is a single protocol solution that allows for the secure transfer of UDP data streams (uni-cast, broadcast and multi-cast) to support applications like streaming video, Syslog messages, and SNMP. UPTS provides a UDP application level protocol bridge across our patented, hardware based security platform to support one-way communications.

All of the Owl Data Transfer applications leverage our exclusive, Common Criteria EAL certified DualDiode Technology™ to support reliable, high speed one-way transmissions. Consisting of a pair of send-only and receive-only communication cards, our patented DualDiode Technology™ operates at the transport protocol layer assuring data integrity and availability at speeds ranging from 26 Mbps to 10 Gbps.

☷ FEATURES

- Real-Time Information Transfer
- Streaming Video & Sensor Support
- Controlled Interface
- Sneaker-Net / Walk-Net Replacement

✔ BENEFITS

- Drop-In Deployment Transparency
- Broad OS support
- Log File-Management System
- UDP Unicast, Multicast, & Broadcast Flexibility

◨◧ DUALDIODE TECHNOLOGY™

Owl's DualDiode Technology™ is built around patented circuitry which only allows data to physically flow in one direction thereby preventing all network based cyber attacks. The design also includes a protocol break which terminates all Ethernet traffic, transfers the payload via the ATM protocol and then converts it back to Ethernet. This has the unique benefit of hiding all the IP and MAC address information from the outside world and preventing any probing of the network. This technology comes in different form factors depending operational environment.

UDP PACKET TRANSFER
- UNICAST
- BROADCAST
- MULTICAST

UDP FILTER

UDP
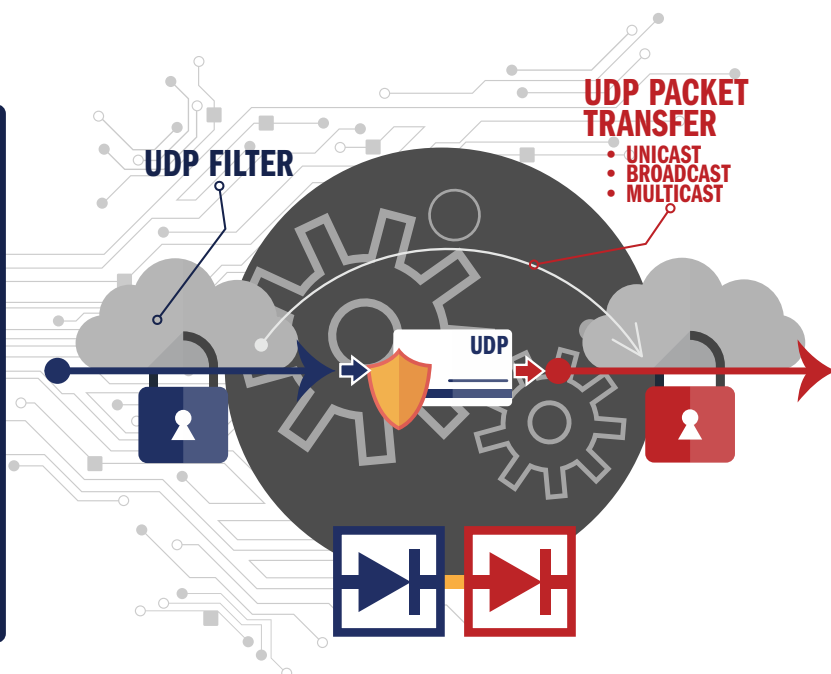
🔍 HARDWARE SPECIFICATIONS

DualDiode Technology™ Hardware:
Server-mounted custom-designed communication cards – one Send-Only, one Receive-Only

Owl V4 Communication Cards:
Fiber-optic multimode, 62.5/125 ST-ST – 155.52 Mbps link speed; 15 Mbps user throughput

Owl V6 Communication Cards:
Fiber-optic single mode, LC-LC 2.488 Gbps link speed
Clear-channel 2500 – 270+ Mbps user throughput
Channelized 2500 – Supports up to 8 discrete application connections across 1 physical link; User throughput 65+ Mbps per connection

Owl V7 Communication Cards:
DualDiode Technology™ OCCs, and drivers enable one-way-only data transfer with upgradeable bandwidth up to 10 Gbps

Owl CDS Small Form Factor:
Two custom-designed communication cards – one Send-Only, one Receive-Only in PC104 form factor, each integrated with independent servers within an Owl CDSSFF chassis -- fiber optic link speed 155 Mbps, with user throughput at 10 Mbps

Owl Perimeter Defense Solution:
Two Owl-designed communication cards – one Send-Only, one Receive-Only in PC104 form factor, each integrated with independent servers within an Owl PDS chassis -- fiber optic link speed 26-155 Mbps.

DualDiode Communication Card Software:
Secure Transfer System Send/Receive drivers & Send/Receive install software

User Application Software:
A wide range of Owl applications for file/directory, TCP/IP, UDP, and UNIX syslog message & SNMP TRAP one-way transfer
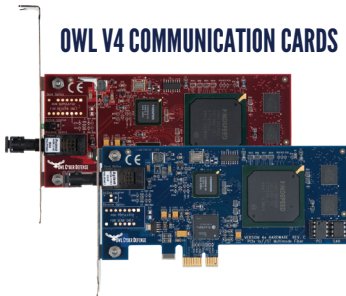
Compatibility:
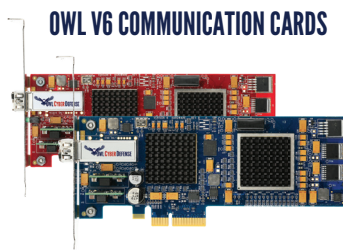Dell PowerEdge, Sunfire and Sun Blade, HP Proliant (for other platforms, contact Sales)

Operating Systems:
RED HAT® LINUX® SE LINUX®
Microsoft WINDOWS® CENTOS®

OWL V4 COMMUNICATION CARDS

OWL V6 COMMUNICATION CARDS

OWL V7 COMMUNICATION CARDS

🦉 ABOUT OWL

Owl Cyber Defense Solutions, LLC 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.

SECURED BY OWL