

# Owl Communication Card Kits

## Version 7



### Advanced, Customizable Data Diode Solutions

**Owl Communication Cards** comprise the core technology of Owl data diode products. Each Communication Card Kit is comprised of two purpose-built network interface cards (one send, one receive) a fiber optic cable, and a specialized **Transfer Software Application**.

Each individual card is installed on a separate host server in a PCI Express slot and they communicate in a single direction over a fiber optic cable via the asynchronous transfer mode (ATM) protocol. ATM serves two purposes – the first is to “break” the protocol of the original transfer for additional security, the second is to facilitate a high bandwidth, low latency one-way transfer using a protocol specifically designed for it.

Each card is color-coded: Blue for send, and red for receive. The send card resides in a designated send server (blue) on the source network, and only has electronic components, including an LED, for transmitting information. The receive card resides in a designated receive server (red) on the destination network, and only has electronic components, including a photodetector, for receiving information. The hardware design of these cards physically enforces deterministic, one-way only data transfers.



COMMON CRITERIA  
EAL CERTIFIED

**EAL4+ Certified**

## Owl V7 High Capacity Communication Cards

The Owl V7 Communication Card Kits family represent these pinnacle of performance in data diode technology. These unique Card Kits comprise the fastest and most versatile data diode solutions available on the market. V7 Card Kits come equipped with an Owl application-specific Transfer Software Application to transfer any variety of data types and sizes, and have the ability to be configured with up to 32 discrete data transfer channels. Owl V7 Card Kits have been Common Criteria certified at EAL4+.

- **OWL V7 – High Capacity**

The high capacity card kit establishes a new benchmark for full line rate, one-way transfer requirements, geared toward traffic-heavy applications, such as network monitoring. The high capacity configuration supports up to 10 Gbps.

- **OWL V7 – Mid Capacity**

The mid capacity card kit establishes a new benchmark for full line rate, one-way transfer requirements, geared toward traffic-heavy applications, such as network monitoring. The mid capacity configuration supports up to 5 Gbps.

### KEY FEATURES

- Support a maximum throughput of 10 Gbps
- One-way UDP (Unicast & Multicast) and TCP/IP support
- Optical isolation, with a single fiber optic cable
- Protocol break - no routable information is passed between source and destination networks
- PCIe Interface

### TECHNICAL SPECIFICATIONS

#### OPERATING SYSTEMS

- RHEL®

#### SOFTWARE

- Owl Secure Transfer System Drivers
- Send/Receive Installation Software
- Owl Transfer Applications for: *Files, Directories, TCP/IP, UDP, Syslog, SNMP Traps*

#### CONNECTION

- Fiber Optic Multi-Mode/ Simple Mode
- LC-LC Cable
- Seamless 10/100/1000/10G Integration

#### COMPATIBILITY

- PCI Express (PCI SIG Compliant)
- Dell PowerEdge, Sunfire & Sun Blade, HP
- Proliant (For other platforms, contact Sales)

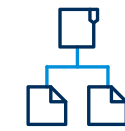
Product	Max Diode Speeds (Gbps)	Fiber Type	Max Distance	PCIe Lanes	Max Channels	Power Usage (w)	Operational Temperature Range (In C)	Storage Temperature Range (In C)	Humidity
V7 High Capacity	10 Gbps	SFP+ OM3 Multimode LC/LC	300 m	8	32	1.6	0 to 40	-40 to 70	5-90% Non Condensing
V7 Mid Capacity	5 Gbps	SFP+ OM3 Multimode LC/LC	300 m	8	32	1.6	0 to 40	-40 to 70	5-90% Non Condensing

## Owl Transfer Software Applications

Owl Data Transfer Applications are the software that serves as the protocol proxy component of an Owl Communication Card Kit, interfacing with the source and destination networks. They are designed to either support a specific, individual protocol (i.e. UDP or file transfer only) or multiple protocols/formats simultaneously

Customers can select the appropriate Data Transfer Application(s) from those listed below based on the type(s) of data that needs to be transferred (UDP/IP, TCP/IP, raw Ethernet packets, files, directories), the protocols being used and whether or not data scanning is required.

All Owl Communication Card Kits are required to include one of the following Owl Transfer Software Applications:



### Directory File Transfer System DFTS

Designed to perform file-based one-way-only data transfers, DFTS supports any file type with no size limitations. It is capable of navigating file directories on the source network, identifying files that need to be transferred, transferring the files across the Owl data diode, replicating the original directory file structure on the destination network, and populating the directory with the transferred file(s).



### Secure Network Transfer System SNTS

Unlike competing unidirectional transfer software, which are restricted to a single data type and/or a single data flow, SNTS can provide a variety of simultaneous, continuous data flows of multiple protocols, including UDP (multicast, broadcast, and unicast), TCP, and Files.

For file transfers, SNTS leverages Owl RFTS software. Users can utilize a single Owl data diode implementation to achieve multiple data transfer goals rather than requiring another data diode for each protocol or data stream.